HEALTH FINANCING AND SUSTAINABILITY
TECHNICAL THEME PAPERS
YEAR ONE

Health Financing and Sustainability (HFS) Project
Abt Associates Inc., Prime Contractor
4800 Montgomery Lane, Suite 600
Bethesda, Maryland, 20814 USA
Tel: (301) 913-0500 Fax: (301) 652-7791
Telex: 312636

Management Sciences for Health, Subcontractor
The Urban Institute, Subcontractor

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HFS Theme Papers

Foreword

Health Financing and Sustainability (HFS), a five-year project of the Health Services Division, Office of Health, Bureau of Science and Technology of the Agency for International Development (A.I.D.), begun in September 1989, provides technical assistance, conducts applied research, and disseminates information about health financing and organization in developing countries. The project's purpose is to influence policy change, assist in policy implementation, and demonstrate and evaluate the effects of alternative policies and mechanisms for financing health services.

At the end of each year of its life, HFS will produce theme papers to assess the issues that have arisen in the course of its work and how they are being addressed in the five technical areas specified by A.I.D. in the project's scope of work. This is the first set of HFS theme papers.

The first set of papers primarily is aimed at an internal audience of HFS staff. It also may be of interest to USAID Mission staff, designers of projects and research activities, and those beginning to pursue health financing, although these groups are not specifically targeted. The first set of papers is aimed at HFS staff because the project has spent most of the first year sending teams to countries around the world to assess health financing problems and to propose and plan assistance. Thus, the project is taking the occasion of the theme papers to step back and examine the problems found against expectations in each of the technical areas. Future theme papers will report to a wider audience on the results of HFS assistance and research in each of the technical areas.

One or two members of the project staff were assigned to each of the technical areas. The five areas and authors are:

- Public-Private Collaboration - Harry Cross and Ruth Levine
- Cost Recovery - Gerard LaForgia and Kirsten Frederiksen
- Social Financing of the Demand for Health Services - Gerard LaForgia and Holly Wong
- Resource Allocation, Use, and Management - Roy Brooks and Brad Barker
- Health Care Costing - Kirsten Frederiksen

Stan Hildebrand, Joanne Bennett, Richard Roberts, Ricardo Bitran, Keith McInnes, James Setzer, and Marty Makinen contributed to the papers through comments, reviews of drafts, and other assistance to the authors.

The five technical areas overlap considerably. The first four represent often-interlocking approaches to improving health financing. The fifth area, costing, is a technique that frequently is used in analyses in support of each of the approaches.

The following few sentences provide an idea of how the approaches represented by the technical areas complement each other. Public-private collaboration usually means that the public sector will allow, regulate, and, often, foster development of the private sector to improve allocation, use, and management of resources. Cost recovery in the public sector is undertaken to generate more resources for the health system. To complement the institution of cost recovery, improvements in quality are usually sought, often through increased efficiency in the use of resources. When cost recovery and increased private participation become important features of a health financing system, the need grows for social financing mechanisms to spread financial risks among individuals and households. The combination of approaches that HFS might recommend in a given situation would depend on the particular legal, cultural, political, economic, and institutional circumstances of the situation.

Each of the papers defines a technical area and describes the problems to be addressed within that area. Based on the experience and knowledge of the staff, HFS began its work with expectations about what the important issues were in each of the technical areas. After completing a year's work responding to requests from USAID Missions and in dialogue with host-country governments, we are in a position to reassess those issues. Many of the identified issues proved to be as important as we expected, and new issues have emerged. The theme papers review our expectations and assess the current situation in each of the areas.

As a result of the requests answered and dialogue conducted, HFS has planned technical assistance and applied research activities for the coming year that span all of the technical areas, frequently in combination. The papers describe how HFS' current and planned activities address the identified issues.

Finally, the theme papers attempt to look beyond the current situation to forecast the future direction of issues in each of the technical areas. We do this to prepare the project for coming challenges. We take some risks in stating what we believe is beyond the horizon, in that the future holds unpredictable events. However, we feel that the best way to be prepared for the unpredictable is to attempt to have a forward vision. Next year's theme papers will update the issues in each area, when what is now beyond the horizon will have begun to come into sight.

HFS THEME PAPER

COST RECOVERY

By

GERARD M. LA FORGIA
and
KIRSTEN FREDERIKSEN

INTRODUCTION

In the last decade, increasing attention has been directed to the role of price in the demand for and utilization of government health services. Governments are the principal health providers in developing countries and services are financed through tax revenues, budget deficits, donations, and loans. In many countries, public services are provided free of charge or for minimal fees in part because health care is viewed as a political right. Cost recovery, achieved through the pricing of services and the charging of fees to users, has played a minor (though increasing) role in generating resources for facilities and services. This paper examines the issues underlying the formulation and implementation of a cost recovery policy.

Slow economic growth or even decline in the 1980s has forced many governments to reduce budgets for health and other social services. Several studies have shown that MOH budgets as a percentage of total government budgets or on a per capita basis have decreased for most non-oil-exporting developing countries. Spending levels fell considerably short of what is needed to meet stated coverage goals. Given the economic downturn, health decision makers realize the prospect for substantial future increases in government financing is limited. In their search for additional resources, these officials together with international donors have sought to test and implement cost recovery arrangements. From a policy perspective, the charging of fees to users of government services is generally considered a first step to recover costs from and generate revenues for health services (World Bank, 1987).

In addition to providing additional resources for operations, expansion, or quality improvement, it is argued that user fees will increase the efficiency and equity of state health service delivery (Griffin, 1988; Jimenez, 1987). Charging nothing or a uniform low price for all types of services results in lopsided financing of high-cost facilities, such as hospitals, to which middle-income urbanites have greater access. In effect, few resources are left over for services elsewhere in the system, particularly in rural areas. Government allocation policies result in an unbalanced distribution of resources favoring curative services in urban areas. Due to the politics of the allocation process, powerful demand makers such as urban workers and hospital physicians can create pressure for resources for urban hospitals while rural and preventive services are underfunded (La Forgia, 1990; Ugalde, 1980, 1979).

Free services are also seen to encourage inappropriate utilization patterns (Griffin, 1988; Jimenez, 1987). Consumers obtain medical care for common ailments at hospitals instead of seeking attention at more cost-effective health centers. This behavior tends to congest the hospital system and leads to a vicious cycle of inappropriate hospital expansion efforts; inefficiency is thus reinforced. Further, because services are free, people tend to overutilize the system. Clients have little incentive to use lower-level facilities. There, personnel have less training and equipment, drug supplies are deficient, and ancillary services are usually non-existent. Since demand is high for modern facilities in urban areas, services are rationed not by need or price, but through queues and familial and political connections (La Forgia, 1989; Lewis, 1987). These mechanisms favor the less sick (who can wait longer) and higher-income clients (who have the contacts). Free service provision does not imply free access or consumption. Time and transport cost discriminate against the poor and rural residents (Heller, 1982; Dor, Gertler, and van der Gaag, 1987).

Fee systems can be simple or complex. In some rural settings, simple, flat-fee systems contribute to resource generation that may be critical to maintaining supply of drugs and other consumables. In other settings, such as hospitals and large outpatient clinics, charging fees that discriminate among different levels of service provision as well as between the rich and the poor and between the sick and not-so-sick is seen to contribute to a more equitable and efficient health service system (Griffin, 1988; Jimenez, 1987). Further, the establishment of a national policy that stresses charges at urban hospitals can contribute to the reduction of state outlays that currently are heavily biased toward the facilities' principal users, middle-income groups. The increased revenue can create additional resources to expand underfunded public health programs and cost-effective primary care services to the poor in underserved areas. This could decrease the burden of time and distance costs.

Advocates of user fees conceptually separate individual curative care from individual preventive care (immunizations, well-baby, etc.) and non-patient related care (vector control, sanitation, etc.) (de Ferranti, 1985; Jimenez, 1987). The latter services have public good characteristics because they contain "external" benefits that affect the welfare of others. A fee structure that charges higher fees for curative outpatient services while keeping fees low for preventive and public health services can contribute to more responsible health seeking behavior on the part of the individual. Likewise, user fees are thought to lead to a more appropriate distribution of resources by health planners in the sense that allocations will be more reflective of a country's overall health care needs. For example, a fee system that reflects the relative costs of medical care should charge higher prices for hospital-based services. This can signal clients to use services more selectively (such as referral systems). Having minimal or no charges for preventive services can encourage greater use of these services by high-risk groups such as mothers and children.

Since demand will respond to both patient costs and priorities in a fee-based system, Jimenez (1987) argues that utilization patterns will provide information to health planners regarding appropriate investment decisions. Prices are seen to replace or at least strengthen bureaucratic decision making through the use of a more market-oriented approach to resource allocation.

The debate over price and income inelasticity of demand for medical care underlies in part government efforts to implement user fee policies. A number of health demand studies have shown that the demand for acute medical care is relatively insensitive to its cash price (Heller, 1982, Akin et al., 1986; Mwabu, 1984).[1] Contrarily, one study found that fees may adversely affect utilization by low-income groups (Gertler, et al., 1987). Further, research has demonstrated that if we account for all types of medical care compensation, cash outlays for private medicine (including traditional practitioners, drugs, etc.) tend to represent a large proportion of total health expenditures by the poor in developing countries. This insensitivity to price suggests that prices for state health services can be raised without significant deterrent effects on low-income groups, especially if the poor pay discounted fees or are exempted from payment.

User fee policies and health demand analyses have been challenged on a number of fronts. Critics suggest that demand studies have not specified the effect of price independent of income regarding the demand for medical care. In other words, they maintain, raising the price of government services may indeed reduce utilization by low-income groups, the principal users of these services (Gilson, 1988). Moreover, the effect of the interaction of price, quality, culture, and distance on demand has not been fully explored. For example, some studies have shown that demand for a particular level of service or a provider may respond more to perceived quality than price. Whether countries can effectively implement user fee systems, particularly in terms of setting prices and creating means tests, that do not exempt the rich or discriminate against the poor is another point in question. Retention of revenues by finance ministries, poor financial management skills of facility staff, absence of cost information, political pressures, and centralized management practices are some of the recognized political-administrative obstacles to implementation (Lewis, 1990; La Forgia, 1989).

ISSUES

Work to date on cost recovery has indicated that the central issues involve questions of demand, quality of care, equity, pricing and revenue generation, and management. In nearly all settings, each of these issues must be addressed to ensure a viable cost recovery system.

1) What is the relation between ability and willingness to pay? How do quality, access, and time interact with price to affect demand?

2) What is the association between quality and demand? Can raising fees result in improving quality? Can additional revenues be translated into improved quality of care?

3) Can exemption policies foster equity? Are they politically and administratively feasible?

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[1]For a review of the literature, see Bitran (1988) and Griffin (1988).

4) How much cost recovery is possible? How can price structures enhance efficient and appropriate utilization?

5) What is the political feasibility of different policy options? Can the management environment effectively handle a user fee system? What incentives can be instituted to encourage fee collection?

HFS ASSESSMENT OF THE ISSUES

1) What is the relation between ability and willingness to pay? How do quality, access, and time interact with price to affect demand?

Governments are generally cautious about introducing user fees to previously free health services. They are particularly concerned about the sensitivity of low-income groups to prices. The ability of the poor to pay for services has become a political issue in some developing countries. More research is needed to specify the many factors that affect demand for different types of medical care in various settings. Research on demand should be performed in greater coordination with governments in order to enhance analysis and facilitate the decision making process regarding policy options.

Studies have demonstrated that medical care demand is generally inelastic to price, but it appears that they have not fully specified this relationship in terms of income or type of services. Also, willingness to pay for private care may not denote willingness to pay for government services. Levying fees may prevent low-income users of government facilities from seeking (or may delay their use of) services. Price (or price levels) may also affect demand differently depending on the type of service sought. Acute care is probably less price elastic than other types of care. Further, factors other than price such as physical access, perceptions of quality, sliding scales of private providers, and the cultural acceptability of care may confound the influence of price on demand. For example, willingness to pay for private providers by the poor may reflect poor access and low quality of government services. In effect, more information is needed on the factors that affect utilization by the poor and non-poor users of government services if fees are raised. How fees would affect the demand for certain services by high-risk groups such as mothers and infants is another point in question.

Demand studies in Peru have shown that income is an important determinant of demand for curative care. However, some studies have shown that demand for a particular level of service or a provider may respond more to perceived quality than price. In Jordan, for example, demand for private, higher-priced care is high among those entitled to free care provided by the government. Private care is perceived to be of higher quality than government services. In Pakistan, demand for private care is also high. However, little is known in either country about the sensitivity of demand to other factors such as distance, culture, and age. In Zaire, demand studies including variables of distance, price, and type of facility (private or public) have been able to show the importance of such variables in determining demand. Lower-income groups tended to use private services where prices were lower than those charged at public facilities. Price-sensitive groups also traveled shorter distances for care. Waiting time has also

been shown to negatively affect the probability of choosing a given provider (Bitran, 1989).

2) What is the association between quality and demand? Can raising fees result in improving quality? Can additional revenues be translated into improved quality of care?

As suggested above, quality (or perceived quality) may be a greater determinant of utilization than price. Econometric models based on data from household demand surveys suggest that if the quality of government services is raised, demand for services will increase. The theoretical increase in demand resulting from better-quality services will offset the combined negative effect of higher prices and lower incomes. Consequently, it is often recommended that user fees can be used to increase quality which in turn will induce demand. Yet relatively little empirical information is available on the effect of user fees on quality, or the combined effect of (higher) fees and (improved) quality on demand. Without quality improvement, it is likely that people will refrain from paying for the same inadequate services that they previously received free of charge.

It is often suggested that improvements in quality should precede cost recovery. However, given the constraints on recurrent budgets, the prospect for quality improvement without cost recovery appears limited. If fees are introduced first, quality needs to be enhanced rapidly or the cost recovery effort may lose political backing and community support. Further, in areas where private and nongovernmental providers are available, raising fees at government facilities without concomitant improvements in quality may drive people to the former providers where they may face even higher prices.

An underlying issue regarding quality is lack of specificity and clarity in the use of the term in demand studies and policy papers. Quality of care can be measured using economic, clinical, patient satisfaction, and operational criteria. There is considerable variation in the definition and measurement of quality across demand studies. Policy recommendations are usually couched in terms of improved facility or system operations (such as using revenues to increase supplies). Clearly, in underserved settings, especially in rural areas, improving drug supplies may be the most practical and effective means to raise quality. Important lessons can be learned on the effect of fees on quality through an examination of mission health services in rural Africa.

Nevertheless, there is a need to specify the potential and limits of quality improvements within a user fee system. For example, in Dominican hospitals, user fees do not contribute to quality improvements per se, rather they are stopgap measures that maintain a basic level of service operations, preventing overall operating performance from falling below a minimal standard. In one specialty hospital, fees are used to purchase diesel fuel for an electric generator, thus avoiding the closing of the operating theater and diagnostic services. Fees did not contribute to an increase in supplies or to improved clinical practices. However, in a regional hospital in Senegal, fees did result in increased supplies of drugs, which by this definition has improved quality of care. In Pakistan, it has been recommended that standards and regulatory boards be established in order to clarify quality. Once quality is clearly defined and standards developed, quality of services can be monitored.

3) Can exemption policies foster equity? Are they politically and administratively feasible?

Any improvement in social equity resulting from user fees is contingent upon the introduction of differential charges based on income. Policies that exempt certain privileged groups, such as civil servants and the military, from paying fees contribute to inequity. In several West African countries, public employees are fully or partially exempt from paying fees.

If user fees are deterrents to utilization by low-income groups, ensuring access through subsidies, waivers, and sliding fee systems are potential corrective measures that can counterbalance the more pejorative (price) effects of cost recovery on the poor. The main practical issue is the administrative feasibility of these mechanisms. In other words, can these systems be effectively implemented such that those who need exemptions or discounted prices receive them and those who can pay do so? The operational effectiveness of these mechanisms is at best variable and further evaluation is needed. (Whether fees are an impediment to utilization is only measurable from the demand side. See earlier discussion on demand.) Without firm screening criteria, incentives to staff performing the means tests, and strong political support, exemption mechanisms may experience considerable slippage or discriminate against the poor.

Implementation problems are evident in several countries. In the Dominican Republic, a sliding fee system based on an informal means test was found to be ineffective. Although it did not discriminate against the poor, a significant percentage of hospital users who could afford the fees received waivers or paid a reduced price. This group consisted of friends and family of hospital employees, military and political officials. In government facilities in Niger, a large percentage of care is provided free to relatives and friends of staff. Poorer, rural patients, not knowing anyone on the hospital staff, are forced to pay to enter the hospital system. Also in Niger, as in other parts of West Africa, many hospitals are ill-staffed to perform meaningful means tests. This results in the indiscriminate granting of waivers to both the rich and the poor.

Improving equity also includes expanding services to previously underserved groups. In Haiti, revenue obtained from curative care services will be used to support exemptions for poorer-income patients and for preventive services in distant, rural communities. In that same country, one hospital seeks to use hospital fees to support community outreach services in the facility's catchment area.

4) How much cost recovery is possible? How can price structures enhance efficient and appropriate utilization?

Governments need to assess the limits of cost recovery policies under different geographical, socio-economic, and service delivery settings. Little information exists on the revenue performance of user fee experiences. Lewis (1990) estimates that hospitals in Jamaica, Honduras, and the Dominican Republic recover from 1 to 9% of their budgets from user fees. Most hospitals sampled collected less than 5%. These modest revenues were attributed to ambiguous policies, poor management, and lack of central-level direction.

How much to charge and for what service are key questions facing those responsible for the implementation of a cost recovery system. Ideally, pricing methods should be based on the marginal cost of the provision of a particular service. In practice, however, real costs play a limited role in rate setting. Since hiring practices usually respond to political decision making, labor costs are in effect fixed costs. Further, although personnel costs represent 60 to 80% of total costs, facility directors usually have little knowledge of them. Consequently, it is often recommended that prices reflect an estimate of average costs of relatively measurable inputs such as drugs, supplies, reagents, etc. However, even data on the cost of these inputs may not be available to health facilities. In the Dominican Republic, hospitals are not provided price information of drugs and other consumables they receive from the parastatal company that purchases these supplies. Fees are set subjectively by hospital directors, usually based on inaccurate assessments of private sector fees. In Belize, prices do not reflect cost or demand. Reforms in revenue generation policies are under way that entail revising fee schedules based on cost, utilization, and revenue-generating potential.

Research is needed on service costs to facilitate rate setting. In Haiti, results of a cost study at one facility will be applied to the setting of fees. Prices had originally been set based on rough estimates of ability to pay; however, the cost analysis showed that certain prices, such as for surgery, were set too low. Decision makers also require simple management information systems that will provide data to perform cost estimates and to keep abreast of price increases. Such systems are currently being implemented in Egypt, Haiti, and Bolivia, at the facility and Ministry of Health levels. Where rate setting mechanisms do exist, analysis of performance and the conditions under which these systems operate is needed. Examples of these systems are found in the National Laboratory in the Dominican Republic, and in mission hospitals in several African countries. Hospital facilities should be allowed to experiment with different fee levels. This will provide useful information on what works. For example, in Haiti, rates for primary care are reduced based on estimates of the local population's willingness to pay for such care, as well as determined need. In Jamaica, rates for outpatient visits are based on a percentage of minimum wage earnings.

Another issue involves what is a reasonable schedule of charges at different levels of the system. Flat fees are relatively easy to collect and are probably an effective option for drugs and services offered in many rural settings. In urban areas, however, a single fee may encourage inefficient use of hospitals or of services within a particular facility. As a general rule, prices should not be applied equally to expensive and inexpensive services. Charging higher prices for hospital ambulatory services is seen to signal patients to seek care at less costly outpatient clinics. But charges should not be so high as to deter the seriously ill from seeking care. Waiving fees for preventive care is seen to encourage greater use of well-baby, family planning, and pre-natal services. In Kenya, such waivers have been proposed. In rural Haiti, where preventive and primary care utilization is low, waivers have led to increased use. More information is needed on the most appropriate system-wide formula for applying fees. Research on the effect of prices on utilization patterns across different types of services (curative vs. preventive) and settings (hospital vs. health center) can facilitate the development of guidelines for establishing fee schedules.

5) What is the political feasibility of different policy options? Can the management environment effectively handle a user fee system? What incentives can be instituted to encourage fee collection?

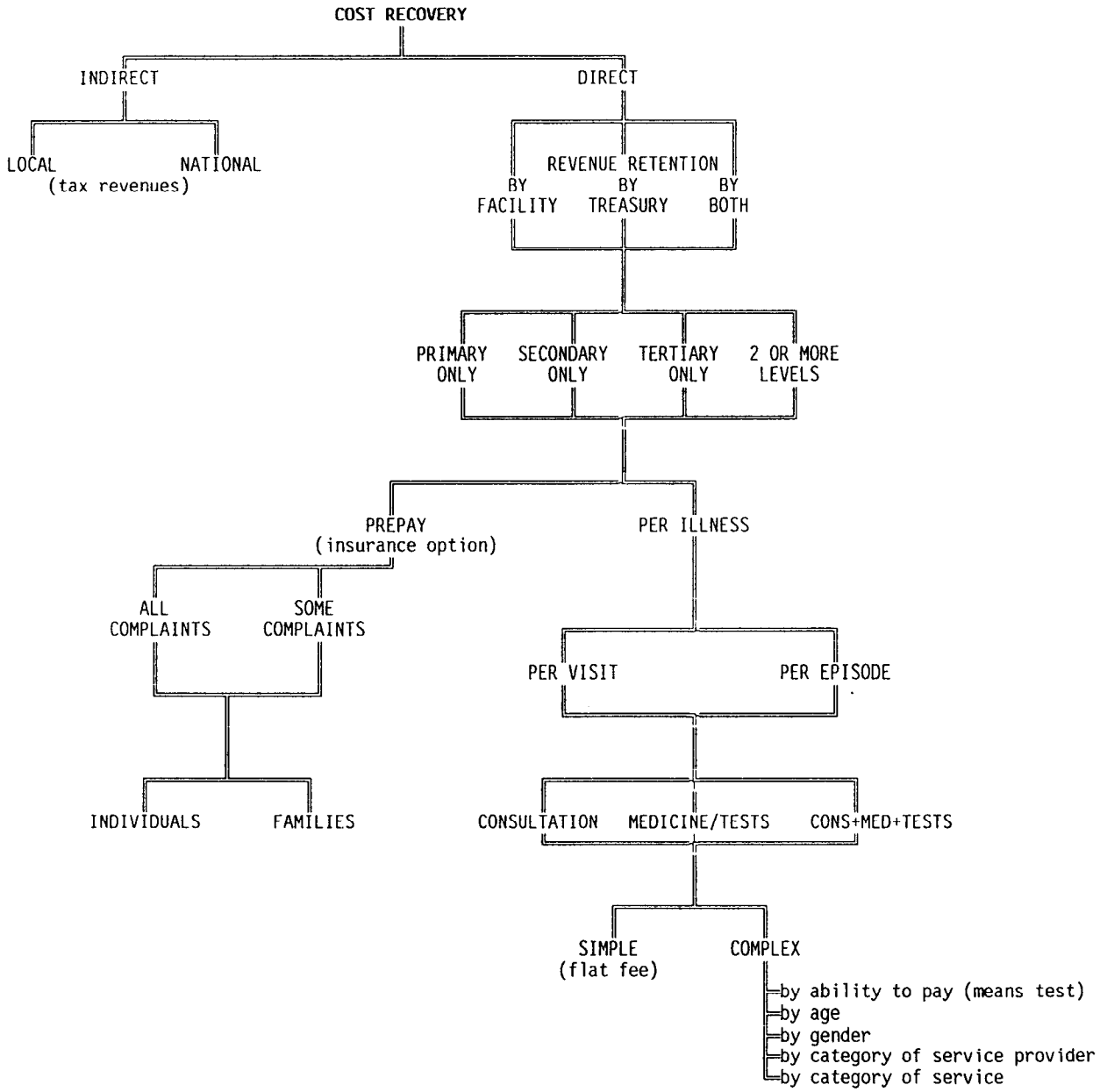
Policy and management issues underpin quality, equity, rate-setting, and revenue-generating considerations. Once the policy decision is made to institute a user fee system, other decisions must follow to facilitate implementation. Figure I illustrates the types of decisions involved in the implementation of a cost recovery policy. The issues underlying a number of these decision points, represented in the figure, have been discussed in this paper. The remainder of this section discusses key policy and management concerns.

First, facilities should be permitted to retain revenues or a portion thereof without experiencing substantial reductions in central-level budgetary allocations. To be sure, it is unlikely that revenues will translate into improved quality unless facility managers have some say in what use is made of this money. For example, in government facilities in Niger, Belize, and Haiti, user fees have not led to improvements of any kind, in part because revenues are sent to the treasury and the facilities receive no direct benefit. In contrast, government facilities in Haiti under private management are permitted to retain fee revenues and use them to provide salary bonuses to clinicians and to maintain adequate stocks of drugs and supplies.

Analysis of facility and system-wide financial needs combined with pilot studies that estimate user fee revenues can facilitate government policymaking regarding the most appropriate allocation formula for subsidies and fee revenues. For example, one option is central-level budgetary payment of salaries and investment expenditures only; another is to use fee revenues to cover specific line items. The former has been successful at government facilities in Haiti under private management. Although politically difficult to implement, decentralization of hiring practices and budgetary allocations is seen to facilitate the performance of cost recovery, as witnessed in Haiti and in parts of Asia and the Near East.

Secondly, governments should assess the politically proper pace of implementation. In developing countries, implementation is the acute phase of the policy process (Grindle, 1980). It is during execution that political participation and demand-making by elites, political parties, and bureaucrats may significantly alter the outcome of policy goals and strategies. As suggested in an earlier section, government officials may be at risk if they charge fees to certain privileged groups, such as public employees and soldiers. However, the revenues generated from these groups may be critical for successful implementation of a cost recovery program. More work is needed on possible cost

FIGURE I: COST RECOVERY DECISION TREE FOR OUTPATIENT SERVICES



Source: adapted from Makinen, M. and S. Block, 1986

recovery options given specific political-administrative contexts. It may be more politically feasible to establish a prepayment system for civil servants and the military than to demand fee payments from these groups. Legislation may be necessary to stipulate price levels by facility level, service category (for hospitals) or type of service (preventive, curative, etc.), and to specify criteria for exemption (or partial exemption) from fee payments.

Third, incentives may be needed for care-giving personnel. Most physicians and nurses would be willing to cooperate if their facility, unit, or service received the benefits of the revenues in terms of improved supplies and equipment. Another option worth exploring is linking salary bonuses to revenue generation. Such options are being considered in Niger.

Finally, without the proper management environment it is unlikely that fee-setting formulas, exemption mechanisms, payment collection, and revenue allocation plans will be effectively implemented. In facilities where administrative capabilities are already weak, adding a complex user fee system without additional personnel and training would be inappropriate. In Niger, fees that could potentially be used to purchase drugs and augment salaries are often not collected because staff have little management training. In the Dominican Republic, facility directors must accept political appointees for key administrative positions. Oftentimes, they have little management experience or training.

We have already seen that without cost data, effective pricing of services is limited. Information systems on costs and other operations may be an important step toward guaranteeing the long-term performance of a fee system. Another issue is the administrative cost of charging and collecting fees. An important area of research is determining the costs of fee collection per dollar of revenue. In some areas of rural Africa, research is needed on cost recovery alternatives in non-monetized economies.

HFS ACTIVITIES IN COST RECOVERY

HFS is currently involved in cost recovery activities in a number of countries. Assessment visits made by HFS staff in the Latin America/Caribbean Region have found cost recovery to be a pressing issue. In Haiti, discussions were held with regard to improving cost recovery in several privately-managed hospitals. At Mirebalais Hospital, HFS will apply the results of a costing study performed last year to develop pricing strategies and a fee collection system. At Bon Repos Hospital, the financial feasibility of the hospital's plans to reopen and institute a cost recovery program will be studied. Efforts will be made to cross-subsidize prices to lower-income patients with higher charges to private-paying patients. A revived insurance plan may finance care for employed workers using this hospital. HFS will provide technical assistance to the private voluntary organizations managing the facilities.

In Ecuador, an HFS assessment showed that free Ministry of Public Health services are overutilized and undersupplied. There is also no provision for financing additional supplies and drugs. HFS plans to provide assistance in the development of fee schedules for public facilities, as well as cost studies to

determine areas of inefficiency. In the private sector, mini-pharmacies will be strengthened to expand service delivery to low-income populations. Linkages between HMOs and cooperatives will be studied as an alternative financing mechanism for basic care for the poor.

Cost recovery reforms are currently under way in Belize and HFS has provided short-term assistance in establishing mechanisms for carrying out these reforms. User fee programs will be revived and revised for public hospital services and drugs, as well as for some ambulatory clinics. HFS will assist the MOH in the standardization of procedures, monitoring, and periodic evaluation. For Belize City Hospital, cost accounting, management, and logistics systems will be established. HFS has plans to assist in the implementation of these systems, including training of staff.

In the Asia/Near East Region, problems exist that can be likened to those in other regions. As in Ecuador, Jordan fully subsidizes its public health services. Due to current economic constraints, however, alternatives for implementing cost recovery for government-provided services are being analyzed. An HFS review of health financing in Jordan revealed the need for two types of studies: analysis of the main mechanisms for financing privately-provided health care (commercial health insurance, co-financed health benefits, cost-sharing by employer/employee), and a utilization study of consumer preferences in health care.

In Egypt, HFS is providing technical assistance to Component One of USAID/Cairo's Cost Recovery Project, focusing on expanding cost recovery to health facilities outside Cairo and Alexandria. Similar programs have had success in the heavily populated cities of Cairo and Alexandria. HFS is currently involved in the planning and management stages, which include defining standards, facility assessment process and procedures, economic assessment criteria and process. Hospital accounting and financial management assistance is also being provided.

HFS participated in an assessment of Pakistan's health sector, analyzing policy options in the area of cost recovery. Pakistan heavily subsidizes its health care facilities, although few public resources are available for preventive and primary services or for the underserved. The projected high demand for expensive, curative care will only serve to intensify this problem, further crowding out care for the poor, women, and children. It was suggested that the private sector could play an important role in the provision of curative health services, and could do so effectively via cost recovery. Government resources would be freed up to provide public health services. HFS is also likely to participate in the evaluation of demand for health care, health insurance alternatives, accurate pricing for services, and reimbursement initiatives.

In the Africa Region, an HFS team assisted the Kenyan Ministry of Health in estimating the additional financial resources required to offer primary and preventive (P/PHC) services at full capacity. The resource gap was estimated by determining the cost of resources currently being used to provide P/PHC services, estimating the resources required to provide the services at full capacity, and determining the cost of increasing the level of service provision from current to full capacity. The results of this study will be used by the MOH to develop benchmarks for reallocating resources toward primary and preventive health care

services. These benchmarks will fulfill the next condition precedent of the USAID-supported Health Care Financing Program and will enable the MOH to receive further funding.

HFS is discussing the possibility of implementing applied research in Togo, one component of which would be cost recovery. Studies would include the analysis of several community financing initiatives already under way that would provide valuable insight about the development and sustainability of such programs in an African setting. HFS has also been discussing plans to place a long-term MOH advisor in the Central African Republic. Activities would center on the implementation of recent health care financing legislation, including initiatives in cost recovery.

FUTURE DIRECTIONS

The central issue that emerges from this discussion is that the success of cost recovery is contingent upon existing political, economic, and managerial conditions. Whether a cost recovery policy can be effectively implemented at the national level, and remain viable over the long run, are open questions. Cost recovery programs have been initiated at various system levels in a number of developing countries. There is no discernible pattern on how to best prepare for or implement a user fee system. Against this background, HFS recognizes the need to assess these experiments in terms of (1) the political and economic circumstances under which implementation occurs, (2) the effect of cost recovery on equity and quality, (3) the efficiency of operational performance, and (4) the generation and maintenance of political and popular support.

Of equal significance, cost recovery is often promoted in terms of the benefits it will provide the poor. More study is needed on the demand for different services and providers by different income groups. How much can low-income groups afford? The effectiveness of exemption mechanisms as well as the ultimate use of fee revenues also require closer examination. Do exemption mechanisms favor the rich or discriminate against the poor? Are fees used to improve or expand services frequented by the poor?

For those countries which have requested HFS assistance in instituting a cost recovery program, it is best to proceed at a careful pace. The political and economic feasibility of various options should be weighed before implementation. Experiments can be devised to compare the acceptability and effectiveness of alternative exemption systems, price-setting formulas, revenue collection methods, and MOH-facility revenue sharing schemes. Finally, more consideration must be given to the organization and management of health services to facilitate the efficient collection and allocation of resources.

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HFS THEME PAPER

PUBLIC-PRIVATE COLLABORATION

By

HARRY CROSS
and
RUTH LEVINE

INTRODUCTION

In this paper, we discuss the dimensions of public-private collaboration in health, and identify key issues of concern in developing countries, based on the experiences and knowledge of the Health Financing and Sustainability (HFS) Project. We also describe HFS activities, and project our future directions.

The private sector encompasses both for-profit and not-for-profit providers of health services, and ancillary goods and services that are not directly part of the government-supported system. The private sector includes fee-for-service providers (physicians in private practice, clinics, hospitals, pharmacies and traditional healers), health maintenance organizations, insurers or other third-party payers, and firms providing support services, such as food and laundry. The private sector also includes all consumers who utilize private sources of health services and products. With few exceptions, the for-profit private sector comprises the large majority of private health services, with PVOs and NGOs accounting for the remainder.

The public health sector, on the other hand, is composed of the government agencies responsible for allocation of funding for public health activities; establishment of norms and regulations for public and private health care institutions, providers, pharmaceuticals, and medical technologies; collection of information and compiling of health statistics; financing of health care through insurance (often within Social Security); training of health care personnel; and direct provision of services, from primary through tertiary levels.

In nearly all settings, even those with comprehensive and accessible public services, a substantial share of curative health care is provided by private physicians or traditional healers. Several studies have found that private, fee-for-service providers are the dominant form of outpatient care in developing countries, particularly in rural areas (Akin et al, 1985; Lewis, 1988). Indeed, in many countries the proportion of health expenditures accounted for by the private sector far surpasses that of the public sector. The following table shows these proportions for several HFS countries:

Private Expenditures as Proportion of Total Health Expenditures (1980s)

Country	Percent	Country	Percent
Belize	44	Haiti	65
Ecuador	45	Dominican Rep.	60
Jamaica	40	Peru	40
Uruguay	66	Pakistan	58
Philippines	74	Jordan	41
Kenya	52	Togo	31
		Senegal	39

Sources: Lewis, 1988, for all except Dominican Republic (Estimate by HFS Project, 1990), and Belize (Raymond, et al, 1987).

The scope of both the private and public sectors hints at the myriad relationships that can exist between the two. The private sector may exist quite apart from the public sector, related only through the State's regulatory activities. Such is the case in Ecuador, where the only interaction between public and private sectors is regulatory. On the other extreme, public and private sectors may be highly integrated, with the public sector contracting the majority of services to private providers, as in Brazil. Alternatively, the government can transfer ownership of some government facilities to private entities, as occurred in the PROSALUD experience in Bolivia. In the case of Zimbabwe, incentives were provided for development of health maintenance organizations or insurance plans. Or, as in Zaire, the government can establish health zones.

The distinction between public and private sectors is blurred in many cases since the same individuals are involved in both. In developing countries, physicians working in the public sector typically are allowed to see private patients part-time. With these dual roles, they may refer patients from one system to the other -- for instance, from their outpatient clinic to public inpatient care, or from a public clinic to their private specialty facility. Even without such arrangements, patients may choose to go to private practitioners for some types of care and to the public sector for others, even within the same episode of illness.

The health care market can be shared by public and private sectors along two dimensions: types of services, and types of patients served. In most cases, the private sector is thought to be best equipped to provide

curative care and ancillary services, while the public sector takes responsibility for preventive health care, broadly defined. And, while the private sector tends to provide services to patients who can pay, the public sector is given the mission of taking care of those who lack access, geographic or economic. There are exceptions: Many private sector providers, including for- and not-for-profit organizations, have a formal or informal arrangement to lower or waive fees for those lacking financial resources, or to accept in-kind payment.

For the purposes of the HFS Project, the definition of "public-private sector collaboration" encompasses: 1) the interaction between these sectors and its effect on private behavior, and 2) the independent behavior of the private sector. The latter is an integral part of the definition, since the extent and character of the private sector have a considerable impact upon the scope and responsibility of the public sector.

RATIONALE FOR PUBLIC-PRIVATE COLLABORATION

Since the early 1980s, most developing country health budgets have tightened, the growth of costs of health care has continued to outstrip general inflation, and decision makers have begun to consider "market solutions" among the many possibilities for meeting the demand for health care. As a result, developing country governments and international donors are giving increasing attention to the potential of increased private sector involvement in health.

Trends in availability of government resources and demand for private health services suggest that there is a strong imperative to emphasize appropriate development of the private sector in health financing strategies.

There are several arguments for expanding the role of the private sector in health care in the developing world.

First, increased private sector activity theoretically can ease pressure on the public health budget. Governments that have attempted to provide free or highly subsidized curative care to the entire population are facing rapidly rising costs, and are less and less able to afford to use public funds to pay for private goods (i.e., those that benefit only the individual). The trend, therefore, is to allocate scarce resources to health care for uninsured target groups, such as children and the indigent, and to public health services that would not be purchased by individuals (e.g., sanitation, immunizations, etc.). The public sector, unable to provide all care directly, may benefit from loosening restrictions or even assisting private providers. Expanding the private sector, then, would have a "compensatory effect" for shortfalls in the public sector (Andreano and Helminiak, 1987).

Second, the private sector is thought to be more responsive to market forces, and therefore more efficient than the public sector. If this is the case, a given amount of resources buys more (or better quality) care in the private sector than in government services, and there is some evidence

to support this argument (Lewis, 1988; Griffin, 1989). Government reimbursement to private physicians, clinics, and hospitals, or direct contracting to private providers, can be cost-effective means of improving coverage and quality if the government can carry out the administrative functions required.

Third, the demand for private health services is income-elastic: as real income rises, the demand for private care tends to increase, as does the demand for amenities and more technologically sophisticated care. In Latin America, for instance, one study found that every percentage increase in disposable income resulted in a proportional increase in private health care expenditures (Musgrove, 1983). Therefore, economic development is bringing about an expanded demand for private services in many countries.

Fourth, along with income, urbanization influences the demand for private health services. Data from multiple-country analyses show that for family planning services, urbanization brings with it an increase in the importance of the private sector as a source of contraceptive commodities and information (Cross, 1986). There are many possible explanations for this correlation, including the effects of proximity to services, cultural influences, and others. There is reason to believe that this is also true with modern health services. Urbanization is still occurring at dizzying rates in the Third World. By the year 2000, about half of the entire Third World population will be living in cities. This urbanization and rising incomes will almost surely raise the demand for private health care.

Fifth, in intermediate-income countries, a demographic/epidemiologic transition is occurring, with a shift in the balance of health needs that are best addressed through public health interventions (such as immunizations) to those that require more individual-level care (such as coronary by-pass operations). Aside from the additional strain placed on government health budgets, these health needs may be most appropriately addressed for large segments of the population through private providers, with an insurance mechanism to protect against catastrophic financial losses.

Sixth, and most importantly, expanding private health services in a rational manner is potentially a highly leveraged activity from the point of view of governments and donors. This means that relatively small start-up efforts can result in large-scale, long-term increases in the availability of health services. Influencing private sector health services is highly leveraged because changes in the systems can be obtained cost-effectively. Such activities as feasibility studies and demonstration projects can be carried out at low cost. And since private firms (or physicians) provide much of the capital for an enterprise, the long-term costs to the public sector or donor are low. Similarly, policy dialogue with governments which leads to regulatory modifications can have an enormous impact on private health services.

In many countries (especially intermediate-income countries), long-term trends in income, urbanization, and poor performances of public health systems will increase people's desire for private care. Large amounts of

financial resources are already being spent annually on health services in many countries, and more will probably be spent in the future. Thus, privately financed health services will continue to be a key to many countries' health care status.

Although expanding the private sector provision of health care has numerous potential attractions to governments and donors, there is a need to be cautious. Precisely because the private sector is so large and influential in many countries, it is necessary to understand the consequences of changes on key health financing issues such as efficiency, equity, and cost-effectiveness before implementing changes. This caveat guides the HFS analysis of the issues and the HFS approach to its work in public-private collaboration.

ISSUES

To date, the attention given to the private sector generally has taken the form of descriptive research. During the past 15 years, research has focused on how the private sector is organized in a given setting, and whether the public is able and willing to pay for care. While the assessments are too variable to summarize, the demand studies consistently have indicated that a large share of the population in developing countries currently seeks private care, is willing and able to pay for services, and prefers private to public providers and facilities. In a few cases, the feasibility of financing care through health maintenance organizations has been studied. [Some of these studies are described in Lewis, 1988.]

Five key issues emerging from this first generation of activities, and recent HFS experience, are listed below and discussed in the following section. The first is related to our general knowledge, the second and third relate to the benefits of an expanded private sector, and the fourth and fifth relate to possible constraints to expansion.

1. Additional information is needed about the characteristics and utilization of private sector health services in developing countries.

2. The private sector could provide more services.

3. Governments are unaware of potential for private sector involvement.

4. The private sector is inadequately regulated by the government -- either unduly restricted by policy and legal constraints, or not sufficiently regulated.

5. The private sector may not provide health services efficiently and effectively.

HFS ASSESSMENT OF THE ISSUES

1) Additional information is needed about the characteristics and utilization of private sector health services in developing countries.

From the research carried out during the last decade, we have learned that the private sector comprises a large share of the total available health care in the developing world, and that it is extremely heterogeneous in nature. However, surprisingly little is known about the behavior and characteristics of the private sector in most settings. Among the many issues that remain to be adequately investigated are: the dynamics of the health care market in situations of physician undersupply or oversupply; how private practitioners establish practices, set fees and waivers, and relate to employers or insurers; what government policies assist or hinder development of private services; what is the appropriate regulatory role for the government in protecting consumers from unethical practices; what affects the productivity of the private sector and how does it compare to that of the public sector; the characteristics and extent of employer-provided health care; how private insurers or self-insuring employee groups cover their beneficiaries; and what preconditions are necessary for successful privatization of public services.

The private sector is a vast resource, certain to gain in importance in the future. To fully draw upon its potential and influence the direction in which it develops, governments and donors must have a good understanding of the structure and behavior of the private sector.

2) The private sector could provide more services.

Given appropriate incentives, in many countries the private sector could provide a greater level and breadth of services than it currently does. Given the underutilization of existing health resources, efforts should be made to link those resources with demand to foster self-sufficient enterprises. Innovative health service designs may be needed to take full advantage of private sector resources.

In the Dominican Republic, Ecuador, Mexico, Peru, and other countries in Latin America, there is an apparent oversupply of physicians. Trained professionals work in low-skill occupations because of a lack of opportunities in private practice. With relatively little assistance, such as tax incentives and technical assistance in management and marketing, these practitioners can establish viable practices in traditionally underserved, low-income areas (see John Snow Inc., 1988 for examples in Mexico).

Large employers represent a natural base for establishment of a cost-effective health insurance or managed care plan. A firm may be able to realize the benefits of improved health, productivity, and satisfaction of employees at relatively low cost (e.g., through incorporation of collection of contributions into the firm's existing administrative mechanisms). In

Zimbabwe and elsewhere, such employer-based plans are common, and there is promise in extension of the idea (World Bank, 1989).

Existing HMOs and other insurance plans could be extended to cover a broader population. For example, in the Dominican Republic there are pre-paid health plans that could cover workers in the informal sector, if an appropriate grouping mechanism can be developed. [Several areas for possible expansion of insurance are covered in another theme paper, entitled "Social Financing."]

Privatization of both patient care and support services often has been suggested as a means of increasing efficiency (and therefore decreasing unit costs). While there remain many unanswered questions about the viability of privatizing health services, it is likely that there are substantial, unexplored avenues for such private-public collaboration (Griffin, 1989; Pfeffermann, 1988; World Bank, 1987).

3. Governments are unaware of potential for private sector involvement.

The traditional separation between public and private health sectors in much of the developing world has resulted in governments making little effort to benefit from the comparative advantage of the private sector in service delivery. Often decision makers lack information about the costs and benefits of privatization, defined as "the transfer of a function, activity, or organization from the public to the private sector" (A.I.D., 1986). The transfer can involve direct patient care, management, or specific services (such as laundry or food). This may be done through contracting out, monopoly franchises, management contracts or leasing of facilities or equipment, and reimbursement of charges (e.g., vouchers).

To determine which functions are appropriate for private sector involvement, decision makers require detailed information on privatization experiences from other settings and its feasibility in the specific instance being considered. The latter typically requires cost-benefit analysis.

The advantages of privatization include the potential cost savings with competitive bidding, and the reduction in personnel costs and overhead borne directly by the government. Contracting is advantageous only where the private sector is relatively competitive, enforcement of the contract's provisions is possible, and the public sector is willing and able to guard against fraud and abuses. It may be hampered by the countervailing forces of public employee unions. From the perspective of the private sector, incentives to take on government contracts or franchises include potential for profitability and a secure source of revenue.

In Ecuador, for example, the private sector is underutilized by the public sector both as a provider of services and a third-party payer. There are strong indications that private sector hospitals are likely to be more efficient than public sector institutions such as the Social Security Institute, which spends 22% of its income on administrative costs. While there is interest in privatization to reduce costs, a study is required to

compare costs of private and public institutions, as well as to estimate the long-term costs and benefits of transferring functions. In Belize, contracting to private firms may greatly reduce food and laundry service costs; the Ministries of Health and Finance, intrigued by the idea, require information on the potential benefits. And in Peru, where the public health services are in poor condition and facing financial crisis, the government lacks detailed information on the economic and social benefits of reimbursing private physicians for care of indigent patients.

4) The private sector is inadequately regulated by the government -- either unduly restricted by policy and legal constraints, or not sufficiently regulated.

Regulatory actions of public and quasi-public (licensing) agencies often artificially affect the supply and behavior of private health care providers. For instance, unnecessarily rigid licensing requirements may make it very difficult for physicians to establish private practices or for-profit clinics (See, for example, HFS Belize Trip Report, March 1990). Long periods of mandatory government service, used to pay back support for medical training, may diminish the pool of private physicians. This in turn reduces access to care rather than expanding it. In Ecuador, chronic overproduction of new physicians resulting from outdated educational policies is a misallocation of scarce medical training resources in a country where in-service training opportunities are few.

On the other hand, the regulatory role of government can be vital to developing and enforcing reasonable standards of care, avoiding unnecessary purchase of high-technology devices, overseeing pricing practices, and producing the "right" amount of medical personnel. The balance between too much regulation and too little is determined by the characteristics of a particular setting: Where the private sector is very active and there is an adequate supply of physicians, such as in Peru and the Dominican Republic, the best role for government vis-a-vis the private sector may be to encourage development of private insurance plans or health maintenance organizations through tax or other incentives. In Belize, with inadequate physician supply and a highly constrained private sector, the appropriate course may be easing restrictions on licensing of private practitioners, and easing regulatory burdens on private insurance firms. In all settings, however, attention must be given to assigning the responsibility for quality control to a public or quasi-public agency.

5. The private sector may not provide health services efficiently and effectively.

The commonly held notion that the private sector operates efficiently, providing relatively high quality services, will be borne out only within a competitive environment. There are several circumstances, however, that lead to an uncompetitive market in which the private sector is unresponsive to changes in demand. It is common to find that an individual practitioner may be both a member of a group that controls licensure and an owner of a practice or facility that benefits from a constrained supply. When services are in short supply, the opportunity exists for monopolistic

pricing. In addition, health care is unlike many other types of services, and physicians in part create demand (through prescribing medicines and tests, and referrals). This creates a spiral of increasing costs, and inefficient allocation of resources (Fuchs, 1982).

Paradoxically, government actions may themselves lead to an uncompetitive environment. For example, legal requirements may restrict entry into the market of new physicians, insurers, or health facilities. Government services that duplicate those offered in the private sector, operating on general government revenues, tend to compete with (and undercut) private services. If a patient can obtain free drugs or laboratory tests in public facilities, there are few incentives to pay for them in the private sector.

There are inherent limits to dependence on market solutions, even when the market is operating smoothly. Regardless of the competitiveness or efficiency of the private sector, there is unquestionably a role for the government in ensuring adequate health services. As stated earlier, responsibility for providing merit goods (sanitation, communicable disease control) and health care for the indigent falls to the public sector. It is important to note, however, that public responsibility does not necessarily connote direct public provision: it may be more cost-effective for the State to pay private for-profit or not-for-profit firms to provide some of these services.

HFS ACTIVITIES IN PUBLIC/PRIVATE COLLABORATION

HFS has sought opportunities for public-private collaboration during its country assessments, and currently is beginning several technical assistance activities to promote this "collaboration" as defined in this paper. The objective of the work is -- and will continue to be -- to achieve an optimal complementarity between public and private sectors. To date, the majority of the work has taken place in (and is planned for) the Latin America/Caribbean region.

Belize: HFS is carrying out a study of the potential for private sector involvement in health service provision in Belize, a country characterized by a highly constrained private sector and considerable demand for private care. From an initial assessment, it appears that policy dialogue can be initiated to ease the restrictions on private practice, and that privatization may be an efficient means of providing several types of support services within Belize City Hospital.

Ecuador: Unlike many Latin American countries, Ecuador does not use the private sector for any of its public health service delivery or as an intermediary. In addition, the private sector is not encouraged either by government policy or regulations to expand health services. In an assessment visit, the HFS team identified several critical areas in which technical assistance could help expand the role of the private sector. These include: 1) to assist PROMESA, a privately-financed program of mini-pharmacies serving low-income rural and urban communities, as it attempts to expand its network from 3 to 60 in two years; 2) to assist the

Solanda/Marcobeli health centers, run by a U.S.-based PVO, to become more self-sufficient; 3) to work with the Consejo Nacional de Salud to sponsor policy dialogue and dissemination activities on health financing and private sector issues, particularly those related to child survival; 4) to help COOPSEGUROS, a large workers' cooperative, establish a prepaid health care system among provincial rural and urban workers and families; and 5) to study the comparative costs of private and public delivery systems in an effort to encourage discussion of private participation in provision of care under Social Security.

Haiti: Two activities in Haiti are related to developing the private sector. First, HFS will carry out a feasibility study for the renovation and operation of Bon Repos Hospital by the Centers for Development and Health, a PVO. Under current plans, the hospital would serve three sets of clientele: poor patients with a limited ability to pay, working poor patients, who could be enrolled in a prepaid HMO-like insurance program; and patients who would be admitted to private rooms by their personal physicians and would pay on a fee-for-service basis. The study will include both a costs analysis, and a revenues and marketing study. Second, HFS will provide technical assistance to the Mirebalais Hospital, which is run by the Child Health Institute, a PVO. Assistance will be given for implementation of a cost-recovery system, including fee setting and development of a monitoring and evaluation system.

Dominican Republic: HFS evaluated the potential for coverage of informal sector workers by existing health maintenance organizations in Santo Domingo. A more extensive applied research study design was developed to assess the benefits of different financing arrangements. The study is designed to match existing groups of microenterprise owners; employees, and their families with private, prepaid health plans currently serving only larger employers. The applied research would answer critical questions about the feasibility of providing insurance benefits to low-income, informal-sector workers, who comprise a large share of all workers in most of Latin America.

Peru: A descriptive study carried out by an HFS consultant in the Arequipa province of Peru found that there are good opportunities for developing private insurance and for privatization of Social Security services. While the public sector facilities have been experiencing a financial crisis and falling into disrepair, private health insurance has been growing. In turn, the private medical practitioners find themselves in a comparatively good market, and are interested in expanding group practices and geographic coverage. In Arequipa, the study found several examples of mixed public and private facilities, where the private patients subsidized services for the indigent. Among the recommendations derived from the research is the establishment of a system to cover very low-income patients through government reimbursement to private physicians. A combination of additional research, policy dialogue, and other types of technical assistance would examine the feasibility of insurance arrangements, and of extending the combined public/private models.

Kenya: One of six technical assistance activities in Kenya will focus on the role of non-governmental organizations in health care provision. The HFS team will review the Ministry of Health strategy for working with non-profit providers, and survey NGOs to assess constraints and recommend MOH actions to increase the viability of the organizations.

HFS will analyze the outpatient benefits for both government and private providers under the parastatal National Hospital Insurance Fund. Private groups of non-traditional beneficiaries (e.g., agricultural cooperatives) will be evaluated.

Central African Republic: The HFS long-term advisor to the CAR will evaluate the role of the private sector, and take up the question of how the government can best work with private sector services.

Pakistan: HFS participated in developing general recommendations for broadening the Government of Pakistan's health resource base and improving the efficiency of the health sector. Among the recommendations was the suggestion that private wings be developed in government hospitals. In addition, it was recommended that government facilities cooperate with self-sustaining PVOs.

FUTURE DIRECTIONS

The behavior of private consumers and providers of health care responds to two main influences: a) the marketplace; and b) regulation from outside the marketplace that has both intended and unintended consequences. HFS analyzes its ability to promote positive change in health financing through both of these avenues recognizing that our limited resources must be applied to a few highly-leveraged activities.

Affecting the marketplace directly is difficult to accomplish for an outside technical group except through the creation of information that would stimulate supply or demand (e.g. feasibility studies, evaluations of existing systems, operational research). Improving the regulatory environment can be achieved by creating information (policy analyses) and promoting policy dialogue. The HFS Project will continue to pursue both approaches to the "public-private" technical area.

Policy dialogue is intended to bring about critical policy changes -- new legislation giving tax breaks to private clinics serving low-income populations, for instance, or changes in legal requirements for licensure. Such changes may be difficult to bring about, despite good information and compelling economic and social arguments. Politically, it may be difficult to prune, or even slow the growth of large public sector health bureaucracies. Politicians may be reluctant to abandon the notion that they can provide free health care for their constituents. In addition, policy changes may precipitate unforeseen (and undesirable) consequences: Without adequate attention to the needs of the indigent, expansion of the private sector -- while holding the line on public services -- may appear to run counter to the government's goals of equity in health care. Unless

designed with appropriate incentives and monitored effectively, introduction of third-party payment systems, along with for-profit providers and facilities, may result in overprescribing and overuse of health services.

Given the limitations in our own resources and the preconditions necessary for institution of reforms in the marketplace and the regulatory environment, HFS will settle into a few countries for a set of extensive public-private activities. Long-term involvement would not only allow the length of time necessary to achieve and evaluate policy changes, but would also enable the testing of a combination of approaches to public-private collaboration. Two candidates for long-term efforts at this writing are Ecuador and Belize.

During the first year, HFS activities in public-private collaboration have developed along two basic lines: characterizing the private sector in a given context; and examining the feasibility of expansion of sustainable private sector enterprises. Thus, in Belize, Peru, and Kenya, we will have a much more complete understanding of the potential for expansion of private provision of health services at the conclusion of our initial efforts. In Haiti and the Dominican Republic, we will have assessed the likelihood of success for the expansion of coverage of several health care facilities and prepaid health plans. These micro-level studies set the stage for macro-level, or policy-oriented change.

In the future, we expect that part of our emphasis will shift toward promoting positive policy changes through collection of key information and dissemination to policymakers. Among the policy avenues we will explore will be reform of tax policies to encourage insurance, and establishment of regulatory incentives (or removal of regulatory disincentives) to private sector growth.

Each of the potential difficulties of policy dialogue can be addressed in a particular setting through focused applied research. In the countries where our private sector assistance is the most extensive, HFS will undertake studies of key questions that will help determine the appropriate direction for our policy discussions and other types of technical assistance.

In sum, it is clear that public-private collaboration represents a potentially fruitful initiative in sustainable health financing. It is also clear that there are many questions that remain to be explored before we have a firm understanding of the best ways in which to promote and utilize the private sector in developing countries.

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HFS THEME PAPER

HEALTH CARE COSTING

By

KIRSTEN FREDERIKSEN

INTRODUCTION

Over the past decade, the financial resources of governments in the developing world have become increasingly scarce. Limits on resources have particularly affected the social sectors, including the health sector. Fewer resources are available for implementation of health policies and programs. However, while health resources have declined, interest in improving the health status of populations in the developing world has continued or increased, especially since the Alma Ata Declaration of 'Health for All by the Year 2000' (Lee and Mills, 1983). As commitment to better health has coincided with rapid population growth and economic stringency, the need to better understand health expenditures and the costs incurred in fulfilling this commitment has come to the forefront.

Different health financing policies, including strategies of cost recovery, public-private collaboration, and social financing, aim to increase available resources and promote efficiency while improving quality and access to services. Increasing the amount of available resources is a means for pursuing the more basic social objective of improving health (Squire and van der Tak, 1975). But, before policies can be chosen and implemented to achieve these objectives, options must be weighed based upon costs, benefits, and feasibility. They must be weighed for trade-offs. Using limited resources for one purpose decreases the amount of resources available for others.

Costing tools play an integral role in policy evaluation and planning, helping determine whether a given approach is feasible or appropriate within resource constraints (Lee and Mills, 1983). Costing helps determine trade-offs. It is used in economic analyses to guide resource allocation decisions and choices among technologies, and in management of service delivery. Examples include cost analysis of services, facilities, alternative delivery mechanisms, cost-benefit, and cost-effectiveness analysis.

Costing is not a policy option or type of financing mechanism, as are social financing, cost recovery, and public-private collaborative efforts. Instead, costing is a tool and technique for measuring the amount of resources used to deliver services. It is a method for gaining more information in order to rationalize choices among policy, planning, and implementation options. On the macro level, costing is used by policymakers for weighing policy options that aim to increase health resources and improve health services. On the micro level, managers use cost information to guide management planning and budgetary decisions that aim to improve the quality and efficiency of a health facility or program.

This paper will discuss the issues surrounding the technique of costing, as it applies to health policy planning and analysis. While the technique itself may seem straightforward to many, it is not often well understood when applied. The purpose of this paper is to discuss and clarify some of the major issues in costing based on the first year's experience of the HFS Project. In addition, the paper describes the plans for HFS assignments to use costing in analytical work and attempts to forecast what issues may arise in this area.

ISSUES

There is general agreement, if only by the sheer volume of costing studies performed, that costing is a valuable tool for quantifying health resource inputs. Costing studies have been performed on a variety of health interventions and technologies (e.g., oral rehydration therapy (ORT), vaccines, contraceptives, hospital equipment) and programs (e.g., primary care, family planning). Cost-benefit and cost-effectiveness studies have also been widely used for economic analyses, as a basis for policy analysis and planning. The literature has documented extensively the use of costing for such purposes. However, a review of costing studies and costing methodology shows that, while costing is often used, there is little consensus on when and how best to use it.

Several points of debate exist with regard to costing. These issues will continue to bear relevance for policymakers and analysts in upcoming years and therefore warrant discussion here. The major issues are summarized below:

1) Lack of clear understanding about cost information, including definition of costs, costing methodology, and its use (e.g. long-term planning versus short-term management);

2) Lack of demand for cost information by decision makers;

3) Questions about the feasibility of information collection and use, including capacity for data collection, interpretation, getting cost information to decision makers, and political considerations;

4) Lack of a clear research agenda for the future, which could include identifying existing gaps in data, improving costing methodologies, and application of evaluation techniques.

HFS ASSESSMENT OF THE ISSUES

1. Lack of clear understanding about cost information, including definition of costs, costing methodology, and its use (e.g., long-term planning versus short-term management).

"Costs" are discussed throughout the health policy analysis and planning literature. However, there is wide discrepancy in the definition, classification, and measurement of costs. Oftentimes, the discrepancy results from a lack of clear delineation of the term "cost" and the purpose for which cost information is being obtained. It is the intent here to show that there are

different definitions of costs and costing methodologies. The type of cost to be calculated and the costing method chosen depend upon the uses they will serve. Costs can be defined as the amount of resources input to provide or receive a service or good (Robertson, 1985). These resources can be in the form of labor, supplies, buildings, equipment, and transportation and are generally valued in monetary terms. Two frequently used and frequently confused costing methods, each of which serves a particular purpose, are economic costing and financial costing.

Economic costing frequently is used for policy analysis. In policy analysis, costs are defined relative to their opportunity cost, which is the benefit foregone relative to their effects on the fundamental objectives (Squire and van der Tak, 1975). Economic costs include those borne by consumers in addition to those of producers. Costs incurred while traveling to and waiting at a health center are examples of costs to consumers, while costs of providing a health service are costs to producers. Where prices and wages are set in ways that do not reflect true scarcity, economic costs vary from stated costs. For example, in economic costing, adjustments are made for non-market wages or overvalued currencies.

Financial costing consists of measuring the transfer of funds and monetary resources used in production. Expenditures, prices of services and taxes paid, and insurance contributions are examples of financial cost measurements. The financial analysis of a project identifies the money revenues and costs accruing to the entity operating the project (Squire and van der Tak, 1975).

There is a considerable amount of debate about the appropriateness of certain costing information for guiding policy and planning. The determination of hospital costs provides one example of this. In the past, expenditure data have been used as a way of measuring the resources required to run and maintain a hospital. Proponents of this method argue that expenditure data, gathered both at the local and national levels, can sometimes provide an acceptable measure of the total resources needed to carry out present and planned activities (Cumper, 1986). Hospital expenditure studies have been carried out in a number of developing countries, including Malawi (Mills et al, 1989), Jamaica (Lewis, 1988), and Ethiopia (Bitran and Dunlop, 1989).

Expenditures by governments on health services may, however, be vulnerable to changes in the availability of budgetary resources and may not be a true reflection of resource requirements (Lewis et al., 1990). If there is an economic downswing and budgets (and therefore expenditures) for certain services are cut, costs will appear to go down. The true resource costs of providing the service have not changed. Many argue against basing cost estimates on expenditure data for this reason. They argue that costs should be based upon the full value of resources put into providing a service of a given quality. For example, when key medical personnel are laid off or drug supplies decrease due to budget cuts, the expenditures associated with the treatment of patients may go down, but the cost of a properly treated patient has not. Hospital cost studies have been performed in the Dominican Republic (Lewis et al, 1990), Haiti (Frederiksen, 1989), and Niger (Wong, 1989), among other countries.

Categorization of costs is also an issue because often certain types of costs, which can have a substantial impact on decisions, are not considered by planners. For example, costs can be categorized based upon the timing of the use of an input (Robertson, 1985). Operating costs, periodic inputs of resources to maintain services, must be considered to plan long-term costs of an investment. Often, only investment costs incurred to start up a service or produce a good are considered. For example, if only investment costs for the building of new facilities are accounted for and financed by donor agencies, the costs of the project to the recipient country will be undervalued. In fact, after construction is complete, the responsibility for maintaining the facilities falls on the country. Further, replacement costs for investments eventually recur as well. Without proper planning for recurrent operating and capital-replacement costs, budgets will not reflect them and funds to support recurrent costs will be lacking.

Costs can also be classified into fixed and variable. Important cost measures that arise from the use of fixed and variable costs are average and marginal cost. Average cost is an accounting measure which consists of dividing the total cost of producing a good or service by the number of units produced. Marginal cost measures the incremental cost of producing an additional unit of output. Marginal cost can be greater, equal, or smaller than average cost.

Clear understanding of the difference between average and marginal cost is critical for policymaking as well as for management. In Zaire, for example, a health zone trying to set up health insurance for inpatient care computed the premium based on the current average cost of a typical inpatient procedure. Since the hospital had low utilization and high fixed costs, the premium came up too high and virtually nobody enrolled in the plan. Had the managers computed the premium based on the marginal cost of a hospitalization plus a small markup to cover fixed costs, they would have come up with a lower, and more attractive premium.

In many developing countries, calculations of the resources needed to expand immunization coverage have consistently underestimated the real need. This is so because the calculations have been made by extrapolating either past average or marginal cost information. The activity of vaccinating children typically has increasing marginal costs, and a careful planning exercise must be undertaken to accurately estimate the additional costs of expanding coverage.

Other issues pertaining to the measurement and use of costs include: the problem of joint costs, where one or more inputs are used to produce multiple outputs and where rules for allocating costs must be adopted (Over, 1988); the measurement and treatment of depreciation; and the effect of inflation on costs. In Niger (Wong, 1989), for example, a hospital cost study apportioned joint costs for salaries according to the proportion of time per day spent by staff on various tasks. Costs can also be divided into direct and indirect. In Belize (Raymond et al, 1987), a cost study allocated the indirect costs of depreciation of equipment and buildings across direct service costs (costs that are directly attributable to that service) in order to obtain the average cost per outpatient visit.

2. Lack of demand for cost information by decision makers.

Without a clear understanding of what cost information provides, decision makers will not demand it or know how to use it, or will have wrong expectations about the use of cost information. On a more fundamental level, they may not even be aware of costs. This is especially true in the health sector, where management is often composed of physicians who are not always aware of resource constraints or who are generally not trained in management or economics. One of the key issues with regard to costing is demonstrating the importance of cost information to decision makers and creating demand for this information.

In Kenya, for example, budget allocations for primary and preventive health services have traditionally been based upon previous expenditures. It has become clear that allocations are inadequate to cover resource requirements of the health facilities and programs, given their quality standards and service delivery goals. However, without cost data, the gap between expenditures and the amount of resources needed to provide varying volumes of quality services is unknown. The Government of Kenya recently has conducted costing studies of these services to learn how large the difference is between expenditures and costs of primary and preventive services at different output levels (Forgy et al, 1990).

A demand for cost information is important not only at the central planning level, but also at the management level. Cost information can be used by managers to link resource requirements to revenues and to make budget projections. In Belize, costing information obtained through the HFS Project will be used by the management of a tertiary hospital to plan expansion of services and potential cost recovery targets. Accounting systems for health services can produce information to permit costs to be monitored. Such systems will be developed in Jordan and Egypt. A cost accounting system can also allow management to be more cost-conscious and efficient. In Egypt, for example, the development and institution of financial information systems through the HFS Project will allow newly-upgraded secondary health facilities to maintain standards for care. With good cost information, budget projections can be made more accurately and the appropriate funds can be made available for supplies and services.

There is increasing recognition of the fact that a better understanding of costs can help in management, planning, and resource allocation decisions. However, an increased awareness of costs is only the first step. Incentives for managers to minimize costs will encourage the use of cost information. But how can incentives be created? In the private sector there usually are management incentives for financial performance. In Haiti, for instance, an incentive for obtaining and using costing information is the sustainability of a non-government organization's health facility. With cost data, prices will be set for services which will recover costs and keep the hospital financially viable. Direct financial incentives could be given in the public sector, such as through salary bonuses tied to levels of efficiency or levels of cost recovery achieved. Finding incentives that work for managers and for policymakers is a challenge to be met.

3. **Questions about the feasibility of information collection and use, including capacity for data collection, interpretation, getting cost information to decision makers, and political considerations.**

To use costing as a tool requires skills and a capacity for collecting and interpreting information. Knowing when and how to gather the information, and which information is most relevant to the task at hand, is vital.

The type of cost information sought depends upon the point of view of the user and the intended use of the information. For example, a policy planner would be interested in knowing the economic costs of a program or policy option, such as hospital expansion, in order to determine the option's potential impact on society. In contrast, a hospital service manager preparing a budget would be interested in determining the financial costs of providing services and the amount of money required to sustain the services. Economic cost information would be less useful for making management decisions than would financial cost data. A hospital manager may ignore the cost of the inputs, such as drugs, that the hospital gets from donors. Nevertheless, if the flow of gifts stops and the hospital administrator wishes to implement pricing strategies that render the hospital self-sufficient in the future, the costs of drugs must be considered in the prices that are charged by the facility. Such is the case in a hospital in Haiti.

Although cost information is vital for planners and decision makers, in many cases it is not sufficient for reaching certain types of decisions. In particular, when studying alternative uses of funds or alternative projects, planners and managers must be able to relate the outputs of each project to the project's costs. This, however, can be a difficult task.

When it is possible to assign monetary values to the project's outputs, cost-benefit analysis can be used. Through the cost-benefit technique, the analyst computes the ratio of a project's monetary benefits to its costs, over time or in present value. This ratio can then be compared among competing projects. For example, a technician in a clinic may want to know whether an old X-ray machine should be kept or replaced with a brand new one. Since both machines produce the same type of output, and the price of the output is known, cost-benefit can be used by comparing future flows of costs and benefits between the two projects.

When assigning monetary values to the projects' outputs is not possible, because there is no consensus about how to value the outputs, cost-effectiveness analysis can be used. Here it is useful to distinguish between two cases. In the first case, the outputs of the alternative projects are of the same nature and therefore across-project comparisons can be made with relative ease. An example of this is a cost-effectiveness analysis of vaccinations through mobile teams versus facility-based immunizations. One such study has recently been done in Zaire. Both interventions produce the same output, i.e., immunized children. The technologies for reaching children differ, however, which implies that the cost structure of both interventions as well as the rate of output vary. Through cost-effectiveness analysis, the cost of an immunized child, at each level of output, is computed and compared between the two alternatives.

In the second case, the outputs of alternative projects differ in nature, and thus cost-effectiveness analysis must be used, although it is necessary to express the projects' outputs in a common unit. This process often requires numerous and sometimes arbitrary assumptions. For example, consider two alternative projects: construction of wells or treatment of dehydration due to diarrhea with oral rehydration salts (ORS). In order to compare both projects, it would be necessary to define a common output or outcome measure, e.g., annual number of deaths attributable to dehydration caused by diarrhea per thousand children. The effect of both projects on this outcome measure would have to be known, or estimated first. Then the costs of both projects could be related to the projects' outcomes to allow comparisons.

Cost information can also be used to measure production efficiency, although there are several empirical obstacles which hinder this type of analysis. First, cost-based efficiency comparisons must be made holding quality of the product constant. For example, if one wants to compare efficiency of ambulatory care between public and private clinics, one must control for quality of the service. Other things being equal, the provider with the highest quality will have higher costs. Controlling for quality of the output is, however, very difficult in practice. Second, comparisons of efficiency that use cost information must control for the volume of output. In fact, efficiency is often measured by the average cost of producing a given level of output. If fixed costs are high relative to total costs, and if the providers being compared differ in their volume of production, the average cost figure will tend to favor the provider with the highest volume. This would have nothing to do with efficiency and attributing such a difference to it would be erroneous. Third, different providers may produce a different mix of services. A comparison of efficiency for a given service would require that the effect of different service mixes on costs of the service studied be controlled for. This is generally difficult since it requires knowledge about how joint production inputs are allocated to the different services.

In sum, the use of cost information is essential for planners and managers alike. Nevertheless, cost analysis is not always straightforward and techniques of varying levels of complexity must be adopted. These techniques sometimes require information which is not available, and therefore certain assumptions are necessary.

Finally, being able to use costing data for making decisions depends upon the political climate or will. For example, in some cases where public hospitals have been shown to be more costly than private hospitals, decision makers have been unwilling to close down public facilities for fear of political repercussions. At issue is how important cost information is for making decisions. Policy decisions are often made under political pressures, regardless of what the data show. This must be taken into consideration when elaborate collection of cost information is considered. Political considerations may overwhelm any effort to make a rational decision among options based on costs and effectiveness or costs and benefits, and therefore should not be overlooked.

4. **Lack of a clear research agenda for the future, which could include identifying existing gaps in data, improving costing methodologies, and application of evaluation techniques.**

As countries face ever-decreasing resources, information about costs themselves will be vital. Since current data on costs of services and inputs to services are inadequate to meet the needs of decision makers in many developing countries, research into the costs of health services must continue. In Jordan, for example, the government is no longer able to finance the free care provided to a majority of the population. More information about health system costs will indicate the magnitude of the resource gap, from which it can be decided how to continue financing health services. In Egypt, more information will be required to determine the costs of bringing health facilities up to a standard level of care.

Methodologies for cost analysis and techniques for evaluating programs and policies must also be improved. In Ecuador, an improved costing methodology could enable researchers, comparing different types of health facilities, to determine the level of production efficiency across facilities at a given level of service quality. This information could be a major stimulus to service improvements in the future. In Haiti, cross-facilities costing suggested that one rural private facility was more efficient at providing outpatient services than a rural public facility (Frederiksen, 1989).

HFS ACTIVITIES IN COSTING

Because costing forms a fundamental basis for health planning and policy, it is vital that costing data and skills be improved in developing countries. For this reason, HFS will work with countries in all three geographic regions, providing technical assistance and undertaking research activities in costing.

Asia/Near East Region

In the Asia/Near East (ANE) region, HFS is building host-country capacity to conduct and use cost-benefit and cost-effectiveness analyses for certain planning purposes. Such analyses will assist in program choice and resource allocation. In **Egypt**, for example, HFS has been working with the Ministry of Health to develop an understanding of costs and outcome measures for design of a cost recovery project. Training is providing decision makers with an understanding of the difference between cost-benefit and cost-effectiveness analysis and when each is appropriate. It is being emphasized that economic considerations must not be left out of project design. Trade-offs need to be considered so that resources are allocated efficiently and effectively.

In **Pakistan**, HFS participated in an assessment of the country's health financing system and recommended that further research be conducted on the cost of health services. Cost information would give indications about the future of health insurance and what is feasible in terms of pricing and supply. In **Jordan**, it has become evident that cost data are lacking throughout the Ministry of Health system due to insufficient financial and cost information systems. The MOH may request HFS assistance to install such a system to monitor resource use. A

microcomputer model of health-sector financing is being prepared by HFS for the **ANE Bureau**. Unit costs of services and wages of health personnel are included in the inputs into this model, which will be field-tested in Indonesia.

Africa Region

In the Africa region, HFS is assisting governments in instituting cost estimates and analyses of financing options for recurrent costs. In **Kenya**, for example, the project provided technical assistance by estimating the costs of primary and preventive health care programs. The purpose of the estimates is to assess the size of the gap between expenditures and costs of the programs, a gap which the Government of Kenya must finance to meet its stated objective of giving priority to primary and preventive health services.

In **Zaire**, family planning services are provided through three delivery modes and six methods. HFS has proposed a comprehensive cost-effectiveness study of delivery modes and methods. The study results would be used by decision makers to determine which modes or methods should be retained or emphasized.

In **Zaire**, like in many other developing countries, immunization rates have stagnated well below desired levels and, in some areas of the country, they have declined. HFS has recommended an in-depth study of the cost of immunizations in both urban and rural areas, as a function of the immunization coverage. Increasing marginal costs may be at the base of the problem, and the existence and extent of increasing costs can be determined through the proposed study. Knowledge about costs will allow policymakers and donors to have more realistic estimates of the level of resources needed for achieving desired goals.

Latin America/Caribbean Region

HFS has found the need to improve costing data in several countries in the Latin America/Caribbean region. In **Belize**, HFS assisted in designing the health financing component of a policy planning and management project. A major part of the project will seek to increase efficiency of the health system through improved flow and analysis of cost information. The MOH's capacity to budget and program will be improved through training in analysis and utilization of financial information. In **Ecuador**, HFS suggested carrying out a hospital costing study to determine the relative costs of treatments across different types of facilities. Such information could have a major impact on the Ecuadoran health sector, including changing the ratio of private to public health facilities depending on which has lower costs. In **Haiti**, HFS will apply the results of a costing study to the development of a pricing scheme for a privately-managed rural health facility. Emphasis will be placed on pricing to recover costs and to improve utilization for certain low-demand services.

FUTURE DIRECTIONS

This paper has identified several areas where costing techniques can provide critical information for decision making. These include:

- costing for the pricing of services
- costing for the measurement of production efficiency
- cost-effectiveness and cost-benefit analysis for choosing among alternative projects and production technologies
- costing for budgeting and planning

While costing techniques have been widely used and have evolved significantly in recent years, several refinements in the techniques are still necessary. For example, the appropriate computation of costs in a multi-service health facility requires the use of methods for allocating joint costs to multiple outputs. Such methods need further refinement. Methods for measuring production efficiency based on cost data must address still unresolved problems such as that posed by variations in quality, joint production, and volumes of output. Through applied research activities, the HFS Project will continue to apply these techniques while improving their methods.

It is clear that costing will remain a vital tool for health policy analysis, but it does not represent an approach to policy reform. As such, HFS will continue to assist countries to strengthen demand, capabilities, and systems for costing as inputs into the policy reform process. However, several issues will impede effective use of the tool unless they are the object of future efforts as well. In particular, training researchers and decision makers in the proper use of costing will be important. This implies not only teaching that costing is useful for rationalizing choices among policy options (thereby creating demand for the tool), but also that there are many facets of costing that must be understood before it can be used. When and how to use costing information to guide decision making will be as important as knowing what costs are. Further, increased attention will be required to help government systems find ways to put incentives in place for efficiency, both for those who allocate resources at the sectoral level and for those who manage the provision of services. With such incentives, the demand for cost information will be strong.

Of equal importance will be keeping in mind that costing can only provide part of the information required for weighing policy options. Costs and benefits of various policies and programs that cannot be quantified in money terms must be entered into the final equation, especially those that will have major foreseeable impacts on health status. Finally, political considerations will remain important in the future and cannot be avoided as one attempts to guide health policy.

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HFS THEME PAPER

RESOURCE ALLOCATION, USE, AND MANAGEMENT

By

M. ROY BROOKS, JR.
and
BRAD BARKER

INTRODUCTION

We can look at the issue of resource allocation, use, and management from two angles. First, we can examine the larger resource allocation questions that treat national policy and practice, looking at how resources are allocated to and within a Ministry of Health. Use and management practices take place within a larger policy environment and must be understood within that context. Second, we can consider how a ministry manages its resources to derive the greatest possible benefit from them. In this paper we will treat both the larger policy-level issues of resource allocation and the more confined issues of resource use and management.

A Ministry of Health faces three key questions. First, what is or should be its relationship to the private sector? This question is considered in the HFS theme paper on Public/Private collaboration. Second, what can it do internally to improve how it allocates resources and how it supports and defends its budget? Third, what is its policy and legal environment and how does this environment affect how it operates?

Ministries of Health universally receive a small portion of the national budget. While lack of financial resources often prohibits a ministry from realizing all of its goals, much can be done within the ministry with the monies it receives to permit its effective operation. National health and financial information systems can be improved to provide better data to decision makers, allowing them to plan and budget more effectively. Tools such as public expenditure programming can be used to improve planning. The budget process can be changed to realign spending and bring it into line with stated health priorities. The ministry's organizational structure can be designed to allow it to operate more efficiently.

National policies and laws can impede effective allocation and management of resources. These policies and laws can involve the hiring and firing of personnel, the importation of medications, the types of interventions that medical personnel of different status can perform, and the right of medical facilities to charge for services. While many of these laws and policies are developed from political rather than economic or health-related considerations, they should be identified and possibly changed if they discourage effective resource allocation, use, and management.

The issues of public-private collaboration, organization, and law are critical in resource use and management at a program or facility level. They form the environment in which health resources are managed.

"Resource management" refers to the effective allocation and efficient use of available resources. The effective management of health resources is one of the key instruments of success in primary health care (UNDP, 1983; Smith, 1978). As management affects how well a health system delivers services to a population, the HFS Project provides assistance to improve the management of health systems.

The practice of management occurs within institutional frameworks, physical infrastructures, social and political constraints. The constraints of a particular setting often preclude the application of management practices that may be effective elsewhere. As the developing world is heterogenous, management systems, while profiting from the experience of others, should be designed to fit the needs of each specific country.

While management systems need to be appropriate to the environment in which they operate, managers in all settings attempt to allocate and use four basic types of resources: human, financial, material, and information. Each resource presents particular management challenges which must be met if a system is to work well. These challenges are described below.

Human Resources

Competent managers are essential if health services are to be delivered effectively and efficiently. In many developing countries, health providers are called upon to perform management tasks. Often these people are not adequately prepared to carry out the resource management components of their jobs and require additional training. In other cases, human resource problems relate more to an inappropriate distribution of available staff or lack of incentives to work effectively. (Buzzard, 1987; Parlato and Favin, 1982)

Financial Resources

The optimal use of financial resources is critical. Lack of funds is often the primary reason why systems do not accomplish their mission. However, while funds are often inadequate, much can be done within this limitation to accomplish more. Failure to contain costs, insufficient and unbalanced budgets, and lack of adequate management and financial control systems can be as detrimental as a lack of adequate funding. Resource allocation hinges on having reliable cost information. Information about costs and utilization of financial resources is often lacking and its absence precludes effective financial management decision making (USGAO, 1985; Lewis, 1987; The World Bank, 1980).

Material Resources

Health programs face a constant challenge to provide the basic material and drugs needed to prevent and treat common health problems. Although many developing countries spend one third of their limited health budgets on pharmaceutical purchases, drug shortages often occur. The areas of procurement, logistics, rational use, finance, and management information systems are critical in an

effective and efficient drug and material management program (WHO, 1988; Quick, 1988). HFS works with developing country managers and policymakers to design and implement systems to improve the availability of and access to essential drugs and complementary material, promote rational use, and minimize costs.

Information

Finally, it is clear that timely, reliable, and simple information is crucial to effective planning and management. Often information may be available but institutions may lack appropriate communication systems and organizational structures or political will to facilitate the sharing and use of information. Often inappropriate information is gathered and cannot be used for management. Elsewhere little information is available and what is available may be untimely or inaccurate. While the amount and type of information gathered can be improved, organizations and their structures must also develop mechanisms to facilitate the effective use of information in decision making and monitoring.

The problem of how to allocate and use funds, people, material, and information to derive the most efficient and highest-quality health services is the problem of resource allocation, use, and management. Next, we will explore some of the specific issues and problems surrounding resource management and what the HFS Project hopes to accomplish in response to these problems.

ISSUES

The topic of resource allocation can cover an extremely broad area. We have therefore chosen to discuss the elements in this field which represent the majority of requests for technical assistance received by USAID over the past several years, and/or issues we consider most relevant to the technical assistance HFS should provide in accordance with its mission.

As mentioned, it is important to keep in mind that lack of funding is only one of many constraints encountered with resource allocation and management. Technical assistance in resource management can lead to the expansion and improvement of services, without requiring increased charges to the patients or increased outside funding. These improvements can also complement cost recovery programs by showing consumers that their money is used efficiently and effectively.

The following represent some of the most common issues faced by health care organizations concerning the allocation, use, and management of resources:

1. **Institutional Development** - Organizational weaknesses between and within institutions make it difficult to efficiently allocate and use resources -- inadequate or inappropriate structures or policies can hinder an adequate response to the needs of the consumer, and result in inefficient and administratively costly operations.

2. **Efficient Utilization of Resources** - Consumers inappropriately use health services because of a lack of information and the existence of improper systems of incentives and disincentives.

3. **Cost containment** - Incentives that are not related to productivity or quality, such as automatic raises for employees, lack of flexibility in hiring and firing practices, and absence of quality control, lead to increasing costs.

4. **Strategic and financial planning** - Organizations often lack long-term strategic plans or have plans that cannot easily be implemented and/or evaluated. This results in an inability to budget for and project future revenues and costs.

5. **Logistics of procurement, inventory, and distribution of medications and supplies** - Drugs and supplies, which represent a major portion of the overall costs and quality of services, are often more costly due to inefficiencies in procurement, storage, and distribution. The management systems that control the distribution of drugs and supplies are often inadequate, resulting in loss of drugs due to improper handling and theft.

6. **Management skills** - Many organizations lack a motivated managerial and provider staff with the skills and incentives necessary to achieve their goals and provide care in a high-quality, efficient manner. This lack of skills is often compounded by inadequate information and financial management systems.

HFS ASSESSMENT OF THE ISSUES

1. Institutional Development

Institutional development is an everpresent need throughout the developing world. Health services are delivered by a variety of institutions, each with its own culture, needs, and constraints. Not only does the internal development of diverse organizations need to be strengthened, but organizations need to collaborate to ensure optimal efficiency in the health system. Institutional development consists of strengthening institutions individually, and improving each institution's ability to coordinate with other institutions.

An organizational structure that maximizes human productivity requires an effective chain of command, knowledge of individual responsibilities, and good channels of communication. Generally, Ministries of Health have requested, or need, improvement in this area.

Often ministries have organizational structures that do not encourage a continual dialogue between the central office and the local districts, leading to increased administrative inefficiencies (Mackenzie, 1988). This stratification results in a planning process which emanates from the top, and a bureaucratic process that does not enable districts to respond effectively to their individual operating requirements.

The HFS Project has found these types of institutional problems in several countries. In **Ecuador**, for example, the Ecuadorian Institute for Social Security (IESS) suffers from poor internal organization, inadequate information systems,

and a civil service office that dictates many of their personnel decisions. HFS will conduct a diagnostic study and policy dialogue on management and organizational problems encountered in one of the IESS hospitals. As many of the problems encountered by the IESS are also found at the MOH, recommendations resulting from this diagnosis will be useful for the MOH as well.

In contrast to **Ecuador**, where HFS will be analyzing the organizational components within a particular hospital, in **Belize** HFS will assess the overall MOH allocation of hospitals, clinics, and private physicians throughout the country. This study is warranted because, while six district hospitals operate at occupancy rates ranging from only 21-42 percent (1986), there are plans to build a new Belize City Hospital with projected annual expenditures equal to 30 percent of the entire current MOH budget.

Peru has undertaken a multi-year process of decentralization of public services whereby all administrative and fiscal responsibilities will be turned over to the country's 12 regions. The regions will be expected to supplement central government funding through local taxes and other revenue sources. HFS will assist the MOH to cope with the problems associated with improving services while regionalizing responsibility.

HFS work in **Egypt** will provide a basis for deciding how physical equipment and facilities can best be utilized. Quality standards will be developed and applied to 40 government hospitals and 10 polyclinics. Also in **Egypt**, we will compare public and private facilities' allocation of human and financial resources.

In addition to the institutional development issues raised herein, there are several countries that have requested HFS assistance in determining what proportions of health care services should be provided by the public and private sectors. In these cases, institutional development requires inter-institutional cooperation, and this topic has been covered in the HFS Theme Paper on Public-Private collaboration.

2. Efficient Utilization of Resources

In this paper, we focus on efficient utilization of resources as it relates to the appropriateness of demand for services. Health services are often consumed and/or expended in an inefficient manner due to inappropriate demand. A patient using the high-cost clinical services of a specialty hospital instead of a primary care center is an example of possible inefficient utilization.

Price is a key determinant of demand behavior when alternative sources of medical care are available (Heller, 1982). Although it has been demonstrated that patients are willing to pay for drugs, significant price increases do dissuade patients (Blakney, 1989). When prices of services and goods are set to encourage the consumption of unnecessary or wasteful services, inefficiency of resource utilization results. Other factors in addition to price mechanisms, such as geographic access, quality of service, and information and awareness, all influence the demand for and efficient use of resources.

Ecuador provides a good example of these efficiency and utilization issues. Social Security and MOH officials there expressed concern that patient demand

differed from their allocation of resources. Their specialty hospitals are having to care for many more routine, primary care services than anticipated, because patients do not perceive the quality of services provided at the local level as satisfactory. This perception has resulted in the provision of routine services at a cost higher than necessary. HFS will provide technical assistance to assess this further and make recommendations.

While curative services can be priced above cost, thus providing short-term cost recovery possibilities, in the long run, "losing" money on preventive care is probably more cost effective for a health system. The **Kenya** National Hospital Insurance Fund (KNHIF) is exploring the possibility of including preventive services in its portfolio of benefits for this very reason. HFS will assist the KNHIF to design a package of benefits and a test methodology which will examine the costs and health benefits derived from the additional coverage.

3. Cost Containment

In the area of cost containment, we examine ways to reduce unnecessary expenditures of human and material resources. Allocation and management of both human and material resources are greatly affected by the flexibility, control, and incentives of supervisors. Ministry of Health managers often lack staffing authority and face civil service requirements which prohibit optimal staffing patterns. Added to this are incentives which motivate inefficient allocation of resources. Paying physicians for laboratory tests or medications ordered, for example, can often lead to an abuse of available services, since this gives physicians an incentive to order a large number of medications and tests. Automatic pay raises without regard to individual productivity make it extremely difficult for supervisors to maximize labor resources. Developing employee incentive systems that link pay raises to performance can increase productivity and contain costs (Peters, 1979).

Cost containment in health care is a constant problem, particularly in the public sector. A recent survey of 31 countries shows that administrative and personnel costs have increased 20 percent from 1979 to 1989. These costs represent on average 70 percent of MOH budgets (Fiedler, 1990). **Kenya**, **Ecuador**, and **Peru** have started looking into ways to counteract this trend and have requested technical assistance from HFS. In each case, improvement will in part depend on the ability of managers to change staff responsibilities and to provide incentives for staff to be more productive and to keep costs down in their own areas.

4. Strategic and Financial Planning

Often there is a discrepancy between public health policies and national health budgets. To be effective, strategic plans and budgets need to complement and enforce each other. Throughout the developing world, it is generally recognized that: preventive care is more cost effective than curative care in improving a population's health status, more people live in rural areas than in urban areas, and more money should be spent on non-personnel expenses than on personnel. Most developing countries understand that a greater emphasis should be placed on preventive health care, and most policies reflect this recognition. However, rarely are budgets planned which reflect this commonly-held view. Usually, the largest amount of money is spent providing curative care to urban residents and

paying staff, rather than in equipping and maintaining facilities and procuring supplies.

The process of strategic planning is not new to the health field. This process consists of analyzing problems and solutions, establishing goals to solve the problems and achieve objectives, and assigning responsibilities to individuals. The end point of this process is a budget involving various levels of management within an organization (Peters, 1979).

The process usually involves an analysis of both the internal developments and external pressures facing the organization, an identification of program needs and requirements, and a delegation of tasks by departments, individuals, and in accordance with specific time frames. A projection of associated income and expenses is then formulated according to program and/or department.

Several countries have requested HFS assistance in addressing their planning and budgeting problems. Many of these problems are typical, and HFS' findings and recommendations often can apply to many countries.

In **Belize**, HFS is assessing the current budgeting practices in hospitals and the MOH. This assessment should improve the ability of the MOH to explain and justify its financial requirements when submitting annual budgets to the Minister of Finance. In addition, HFS has recommended that a three- to five-year plan be developed, including cost estimates to help defend resource requests and anticipate cost increases. The MOH hopes that this improved anticipation of costs will reduce its repeated "crisis requests" for funds from the MOF, and improve its credibility in financial management.

In **Uruguay**, HFS will assist the government to develop a long-term strategy for caring for the aged. The government wants to anticipate some of the health needs of the elderly and their related costs, and then allocate available resources in a cost-effective manner that considers the comparative costs and benefits of preventive versus curative health interventions.

A similar issue of determining what proportion of funds should go to curative versus preventive care has come up in **Kenya**. HFS worked with the MOH in Kenya to analyze current budgets and expenses in the provision of primary and preventive health care. Through this analysis, the gap between the amount currently spent and the amount which would be required to provide "full-capacity" care was derived. This information is essential for the GOK to redesign its budget to more accurately reflect and support actual health priorities.

Often strategic planning is desired by countries, but is not carried out because there is insufficient information about choices and alternatives to develop a consensus on what should be done. In **Niger**, HFS will help the MOH to gather and test information about financing alternatives and then to develop a policy-level consensus on which alternatives are best for the country. Similarly, in **Zaire**, HFS may undertake a cost recovery study in health zones. The results of this study would be used to develop a national policy dialogue leading to country- and zone-level strategic plans.

5. Logistics of Procurement, Inventory, and Distribution of Medications and Supplies

Despite their importance in quality of care and the fact that a large portion of most countries' health care budgets is spent on pharmaceuticals, the logistics of drugs and medical supplies are often inadequate. These logistics include selection, purchasing, establishing optimal inventory levels, and managing the distribution of drugs and supplies. Technical assistance to improve these systems can include: (1) the establishment of a decentralized (revolving) drug fund; (2) encouraging community involvement to provide local enforcement and working capital for drug funds; (3) examining the consumer's willingness and ability to pay; and, (4) developing financial management skills to implement and monitor efficient programs (Blakney, 1989). These are positive ways to improve logistics systems, but they will not provide a complete solution. The unfortunate effect that leakage and waste have on these systems must also be recognized. Leakage and waste can be due to mismanagement or more direct fraud and corruption. Waste, to the extent it is due to mismanagement, can be addressed and solved. Fraud and corruption, to the extent they are systemic, are certainly more difficult to resolve. Nonetheless, since fraud and corruption can prohibit otherwise effective solutions from succeeding, their role must be recognized in attempting to improve procurement, inventory, and distribution systems.

In many countries where Ministries of Health do not have easy access to hard currencies, there are instances of inability to get funds for requested drugs, even when patients are willing to pay for them. In these cases, a revolving drug fund may be a solution. This is a system in which the revenues and expenses related to the purchase and sale of drugs are factored out so that only drugs that are purchased are replaced. Enabling pharmacy departments to purchase drugs in this fashion reduces time lags which occur when drugs are part of overall hospital budgets and have to go through lengthy and encumbered approval processes. In **Zaire**, HFS may be investigating ways to improve the revolving drug fund system currently used by the CCCD Project to supply its own regional offices which in turn supply medical facilities and health zones throughout the country.

HFS is planning to provide technical assistance in **Niger**, **Kenya**, and **Belize** in analyzing and providing recommendations on how to improve logistics systems. In the case of **Belize**, once the recommendations have been made and the revised procedures agreed upon, HFS will provide technical assistance in training and evaluation over a three-year period to ensure that the recommendations have been properly implemented.

In **Ecuador**, logistics have not been identified as a single factor to be analyzed, but HFS plans to provide technical assistance by performing a diagnostic study for one of the Social Security hospitals and looking at the management problems they are encountering. Social Security officials have already pointed out that they believe that nearly 40 percent of their pharmaceuticals are unaccounted for due to logistics problems, and that this has exacerbated an already critical problem involving drug shortages at local health facilities.

6. Management Skills

In ministries throughout the developing world, people with medical degrees are called upon to manage resources. These people are often ill-equipped to handle resource management problems, and could benefit from training in this area. HFS has identified a number of countries where management training would be useful in improving resource allocation.

The USAID Mission in **Egypt** requests that HFS provide a management training advisor to assist its Cost Recovery for Health Project in developing a plan of training norms and standards for hospital administrators, management staff, physicians, nurses, and general support staff. Managers will be trained in assessing resource allocations by geographic region and in the use of personnel and physical plant standards.

Management training will be provided in **Belize** to assist Ministry of Health managers to formulate better budgets and plan long-term resource allocations.

HFS ACTIVITIES IN RESOURCE ALLOCATION, USE, AND MANAGEMENT

During the first year of operations, HFS has provided technical assistance in the key issue areas presented in this paper. The following table summarizes these activities by country:

HFS ACTIVITIES
RESOURCE ALLOCATION, USE, AND MANAGEMENT

COUNTRY	INSTITUTIONAL DEVELOPMENT	EFFICIENT UTILIZATION OF RESOURCES	COST CONTAINMENT	STRATEGIC/ BUDGETARY PLANNING	LOGISTICS FOR PHARMA AND SUPPLIES	MANAGEMENT TRAINING
BELIZE	X			X	X	X
ECUADOR	X	X	X		X	
EGYPT	X					X
DOMINICAN REPUBLIC						
HAITI						
KENYA		X	X	X	X	
NIGER					X	
PAKISTAN						
PERU	X		X			
URUGUAY	X			X		
ZAIRE		X				

FUTURE DIRECTIONS

Following is an outline of the issues in resource allocation, use, and management that the HFS Project believes should receive greater emphasis in the future. While we do not expect to be able to work on all of these issues, they will guide the direction that the HFS Project will take in the area of resource allocation, use, and management. First, we look at the issue of policy and policy change on a national and facility level, next, we examine the financial, human, material, and information resources that are involved in this topic. These are: Budgets, Financial Management, Personnel, Drugs, and Information.

1. Policy and Policy Change

While the decision of how and when HFS encourages policy reform will be determined by the particular policy's detrimental effect on health-sector performance and the probability of success in changing it, HFS will encourage revision of certain common policies which tend to discourage proper resource allocation, use, and management. These are: 1) laws which prohibit cost recovery and/or the retention of fees; 2) personnel policies which preclude performance incentives and labor force mobility, or those that deploy staff irrationally; 3) importation taxes on essential and/or generic drugs; 4) laws which discourage private sector competition; 5) budgeting policies which encourage simple incremental percentage increases, require unspent allocations to be returned, or do not encourage budgeting by objective.

Those seeking to effect policy change must find a proper balance between working to change national policies which may impede appropriate resource allocation, use, and management and working to improve facility-level management systems. After striking a proper balance, there are various ways in which one can effect changes in national or facility-level policies. There is a range of approaches, including (a) policy dialogue with decision makers, (b) conducting analyses and undertaking small-scale pilot studies, (c) assisting in compiling information to accommodate such changes, (d) helping to develop analytic tools to identify areas for intervention, (e) providing training and assistance to institutionalize these capabilities in host countries.

An area in which we have little information and experience is in understanding the political and organizational dimensions of these changes. Given the variety of challenges and options for responding to problems, and the particularly complex, political context in which resource decisions are made in the developing world, HFS will assess the feasibility of change and seek at least incremental changes in policy. This work will by necessity be eclectic, looking at a wide range of issues at different levels of application.

2. Budgets and Budgeting

Budgets are significant resource allocation statements. In this area, HFS has five objectives. These are: 1) help MOHs to see budgets as policy documents, 2) assist ministries to develop "crosswalks" between line item budgets and program budgets to ensure that budget categories reflect policy choices, 3) improve the budgetary process, 4) through better financial management, increase MOHs' ability

to defend their budgets before MOFs, and, 5) help ministries to better understand the importance of a proper resource allocation balance between the public and private sectors.

There are often wide discrepancies between stated health goals of a Ministry of Health and expenditure priorities. HFS intends to assist Ministries of Health to see and understand budgets as statements of policy. To make stated goals meaningful, expenditures and goals should match.

Most ministries increase budgets on a yearly basis equally across all categories without much consideration of overall policy objectives. Yet, determining which program and which category of expenditure should receive what percentage of a generally meager amount is difficult. HFS will assist ministries and donors to determine the appropriate mix and percentage of their total budgets to devote to specific programs or line items. As policy-based lending becomes more common in the health sector, ministries that have developed information systems and budgeting tools will become successful in attracting large non-project aid packages, considerably enhancing their ability to further develop the sector.

Further, HFS will seek to improve the budgetary process, allowing for more bottom-up planning than is currently evident in most countries. Bottom-up planning requires that facilities and programs be assisted to control and allocate their expenditures.

Often Ministries of Health have inadequate accounting and financial management systems. This puts these ministries in relatively weak negotiating positions vis-à-vis Ministries of Finance since they cannot easily identify how their funds were spent and the effect their actions have had on the population's health. Through improved financial management systems, MOHs will be able to better defend and support their budget proposals to MOFs.

The role of the private sector, including NGOs, is often misunderstood and overlooked when ministries allocate resources through their annual budgets. This omission often leads to inefficiencies and duplication of services. Ministries need to understand activities of the private sector in looking at the overall health sector and determining the government's role.

3. Accounting Systems & Financial Management

One of the keys to effective budgeting is in adequate accounting and financial management systems. If a system does not know where its money is currently being spent, it can hardly evaluate where to put financial resources in the future.

In the area of accounting, HFS has two objectives. These are: 1) to assist ministries and/or facilities to develop double-entry accounting systems using accounts which will help them explain and defend expenditures against their stated goals, 2) to use accounting to improve the pricing of goods and services.

Accounting information is used to improve the financial management of health facilities and institutions. Financial management systems can be further developed, with increased automation through computers, to create integrated financial management information systems. One of the principal concerns of the

HFS Project in the near future will be to help ministries and facilities understand when these tools are appropriate, for whom, and why. We will be concerned with changing incentives in government systems so that managers will demand more information and greater financial control.

Most countries are not prepared for fully integrated computerized financial management information systems. While in the long run, HFS hopes to help countries move toward this goal, our immediate objective in this area is somewhat less ambitious. Here we seek to 1) help ministries and facilities develop financial management systems which allow them to track costs and integrate greater internal cost recovery revenues, and, 2) help managers better appreciate the need for and use of financial information, thus increasing the demand for this information.

4. Personnel

The rational use of human resources is critical to efficiency. Currently, this resource is not being used optimally in most developing world health systems. Yet, significant percentages of all health budgets go to pay personnel. Several personnel allocation and management problems are within the scope of the HFS Project. HFS seeks to help ministries 1) rationalize the deployment of personnel to reflect stated goals and priorities, 2) develop payment systems that include performance incentives, 3) liberalize hiring and firing practices to give facility managers greater control, 4) revise organizational structures and develop job descriptions, 5) encourage effective training programs, especially in financial and drug management.

5. Drug Management

As drugs represent a major portion of ministries' and health facilities' budgets, their proper management is essential to the financial well-being of health systems. In this area, HFS will concentrate its activities on assisting governments to: 1) improve their needs assessment and ordering systems, 2) determine proper pricing practices for cost recovery, 3) develop and manage revolving drug funds, 4) encourage proper prescribing practices to the benefit of the essential drugs program and to discourage waste, 5) experiment with private sector substitutes for public purchasing and logistics operations.

6. Information

HFS believes that for information systems to work effectively, they must be demand driven. In this area, we will look to: 1) create incentives to increase the demand for information and work with managers to help them understand their needs for and use of information, 2) help governments streamline their data collection systems to eliminate useless data, 3) encourage the use of financial and client information for cost control and resource allocation, and, 4) assist ministries to automate and computerize their information systems, once manual information systems have been developed.

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HFS THEME PAPER

SOCIAL FINANCING OF THE DEMAND FOR HEALTH SERVICES

By

GERARD M. LA FORGIA
and
HOLLY WONG

INTRODUCTION

This theme paper seeks to review the major issues regarding social financing in developing countries. It also highlights HFS activities performed to date and outlines requests for technical assistance received from the field. At the same time, this paper delineates the focus and direction of HFS assistance in the area of social financing.

The HFS Project seeks to assist in the extension of social financing schemes to uncovered populations. One focus will be the identification and testing of grouping mechanisms to create risk-sharing pools of uninsured individuals. The uninsured include low-income groups residing in peri-urban and rural areas, or similarly, participating in the traditional rural or informal urban sectors. They tend to have limited access to poor-quality public (health ministry) facilities. Another focus will be the strengthening of cost-containment capabilities and quality assurance methods of existing schemes. These efforts may result in shifting those who are able to pay away from free public services, thus enabling the state to devote more resources to uninsured groups.

Social financing is an umbrella term that refers to financial risk-sharing arrangements that cover the health needs of a defined membership -- usually the contributors. The term risk refers to the possibility of an "adverse deviation," (an illness-related financial loss) from a desired state or outcome. Risks can be avoided or reduced through diet and behavior, e.g. minimizing the risk of heart disease through a low cholesterol diet and a program of exercise. From an insurance perspective, risk can be shared with others and/or transferred to a third party.

A risk-sharing scheme entails the contribution of relatively small amounts of money (premiums) by each participant of a given group to create a large fund. This fund provides the means whereby risks, or uncertain health events, are shared financially among a relatively large pool of people. The risk of financial loss is transferred from the individual to the group. This usually means that risks are spread among both the ill and the healthy. In some schemes, risk coverage may foster equity as protection is shared by both the poor and non-poor. The premium levels are usually set according to the statistical frequency with which a group requires care. When treatment of an illness requires an individual or family to pay a large amount of money, risk coverage removes the threat of financial catastrophe that could result. For the poor, large outlays resulting from an injury or illness could aggravate poverty.

In addition to covering unpredictable, catastrophic events, other schemes, known as prepayment plans, cover more "certain" events. That is, payment of a premium entitles the enrollee to a specified quantity of services including preventive care. Since premiums are often based on group utilization rates, these plans usually provide incentives to providers (or establish practice patterns) to reduce "unnecessary" use.

Table I summarizes the attributes of a generic selection of risk-sharing arrangements found in developed countries. Some of these are found in developing countries as well. Many health insurance schemes involve a third party that accepts the risks of the potential costs of medical care, and at the same time is responsible for paying the providers. Third parties can consist of government-organized agencies or private insurance firms. Group risk-sharing schemes require the existence (or creation) of a grouping mechanism to collect the premiums and to pay a third party or the providers for health services for the contributing membership. These mechanisms may include agricultural cooperatives, employers, trade associations, unions, or community-based organizations. In some cases, the grouping mechanism and the third party payor may be the same entity. That is, for example, the cooperative or trade association pays the provider directly. In other cases, such as health maintenance organizations (HMOs), the insurance and health service delivery functions are unified within a single organization.

Compulsory insurance schemes for specific groups of salaried workers exist in many developing countries, particularly in Latin America. These government-organized insurance schemes may own or operate a network of facilities or contract private providers to render services to enrollees.

Other forms of social financing mechanisms exist throughout the developing world. These include community-based schemes, such as revolving and mutual aid funds organized by tribal and kinship groups, religious organizations, charitable associations, etc. The schemes may not involve risk-sharing. Contributions can be in cash, kind, or labor. The schemes provide a more limited range of services and often focus on a single service (such as drug provision) or on "one-time" projects (such as latrine construction).

Given the severe resource limits faced by state-funded health systems throughout the developing world, social financing is considered an important vehicle through which countries can mobilize and allocate resources to the health sector and at the same time extend (and improve) coverage. Finally, health insurance may foster diminished stratification of coverage and access, improved quality of care, and more efficient patterns of service delivery and consumption.

TABLE I: A SELECTION OF RISK COVERAGE SCHEMES EVIDENT IN THE HEALTH SECTOR

				PREPAYMENT PLANS		
CHARACTERSITIC	SOCIAL INSURANCE (a)	EMPLOYER-SPONSORED	TRADITIONAL INSURANCE	IPA-TYPE HMO (b)	STAFF HMO (c)	COMMUNITY-BASED
SCOPE OF BENEFITS	comprehensive in Latin America; variable elsewhere	variable	comprehensive	comprehensive	comprehensive	usually primary health care
TYPE OF PLAN	government-sponsored; mandatory for most public employees and salaried workers in urban areas	group	individual and group	usually group	usually group	individual, group, or production-based
RISK ASSUMPTION	social security fund	employer	insurer	insurer and providers	insurer and providers	community or cooperative; sometimes with government participation
CHOICE OF PROVIDERS	limited to fund facilities or contracted providers	limited to employer facilities or contracted providers	unlimited	limited to physician "network"	limited to HMO facilities	usually restricted to public/private facilities and providers in community
PROVIDER PAYMENT	salary and fee-for-service	salary and fee-for-service	fee-for-service (reimbursement)	capitation and fee-for-service	salary	salary and fee-for-service

(a) Medical care schemes provided by government-organized or sponsored social insurance funds.
(b) An IPA, Independent Practice Association, contracts individual physicians who provide services to enrollees. Physicians generally do not practice together and referral arrangements range from strict to non-existent.
(c) Medical personnel are directly employed by the insurer to provide services in the insurer's facilities.

ISSUES

During the 1980s USAID and other international aid agencies performed assessments of public- and private-sector health financing in a large number of developing countries. Generally, these appraisals identified severe restrictions on state-supported health services and recognized the need to implement alternative financing mechanisms in collaboration with the private sector, community organizations, employers, and other intermediaries. Insurance is invariably listed as a major option to both finance and extend health services.

A good deal of effort has gone into broadly documenting different forms of service delivery and financing (including insurance) in the public and private medical sectors as well as understanding existing approaches to public-private collaboration in developing countries. These studies represent a necessary first step that has advanced our understanding of the strengths and weaknesses of both the public and private health sectors (in terms of financing, service delivery, and coverage). They also serve as important guides to future research and project development.

In short, the feasibility studies and health financing assessments of the 1980s have laid the groundwork for a second level of activities in the 1990s. Regarding health insurance, this second generation of activities will focus on identifying, testing, and implementing (or extending) existing (and functional) social financing models. The feasibility studies have demonstrated that the important social financing issues and problems can be addressed through empirical investigation, such as studies of currently available benefit packages, member behavior given certain incentives and disincentives, and the performance of financing schemes under different types of arrangements between providers and insurers. Practical solutions will depend on resource availability, socio-demographic conditions of target populations, and the existence and development of social financing mechanisms unique to each country.

The following social financing "issues" were identified in the general literature and by HFS personnel during field visits. They should not be considered mutually exclusive; overlap exists at many levels.

Issues:

1. Limited Coverage of Low-income, Non-salaried Workers and Their Families

2. Lack of In-depth Knowledge of HMOs and Other Existing Insurance Schemes

3. Limited Coverage by Social Security Services

4. Inefficiency in the Consumption and Production of Medical Care Under Insurance Schemes

5. Socio-cultural, Economic, and Managerial Constraints to Community-based Social Financing Schemes.

6. Absence of Preventive Services Offered through Third-Party, Social Security, and Community-organized Health Plans

7. Government Policies Inhibit Private Insurance Initiatives

HFS ASSESSMENT OF THE ISSUES[1]

1. Limited Coverage of Low-Income, Non-Salaried Workers and Their Families

Informal urban and traditional rural workers as well as temporary employees are for the most part excluded from formal insurance mechanisms (including social security) in developing countries. This situation has been observed in a number of HFS countries including Ecuador, Peru, Dominican Republic, Pakistan, and Jordan. Although the size of the economically active population participating in the informal economy is large in most developing countries, ranging from 20% of the labor force for middle-income countries to 80% for low-income countries, they are generally considered ineligible for insurance coverage. Their low earnings and the high costs of premium collection severely limit their ability to participate. These groups often have only limited access to low-quality MOH services.

Testing whether these uncovered groups can be reached through innovative insurance schemes is an important focus of HFS. One approach will be to identify and assess the appropriate intermediary organization (such as community groups, trade and credit associations, cooperatives, etc.) that can serve as the "grouping mechanism" to establish an insurance plan. A number of different organizations which currently serve, or have the potential to serve, as grouping mechanisms have already been identified by HFS in several countries:

- rural cooperatives in Kenya;
- rural "Zakat" funds in Pakistan;
- credit and housing cooperatives in Peru and Ecuador;
- ambulatory vendor associations and rural community "juntas" in Peru; and,
- microenterprise credit associations in the Dominican Republic.

Further efforts are needed to assess institutional capacity to administer such plans as well as to analyze the demand for insurance (and health services) among potential enrollees.

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[1]Based on HFS trip reports and discussions with HFS personnel as well as on the following sources: Akin (1987, 1989), Gómez, 1988, Abel-Smith and Dua (1987), Ugalde (1985), Duarte, Gómez, La Forgia and Molina (1988), Mesa-Lago (1989a, 1989b), USAID/Jordan (1989), Mwabu (1989), World Bank (1988), PAHO (1977), Mills (1983), Abel-Smith (1986).

2. Lack of In-Depth Knowledge of HMOs and Other Existing Insurance Schemes:

With the possible exception of Social Security regimens in Latin America, we have relatively little information on the operations of third-party insurance schemes that serve low-income groups in developing countries. This is particularly the case regarding schemes managed by private firms, communities, agricultural cooperatives, and trade and worker organizations. Health assessments and "appraisal" studies performed during the 1980s have inventoried a variety of plans operating in most countries and have often recommended them as an option for coverage extension. Yet specific information on benefit packages, coverage limits, payment ceilings, provider relations and resources, premium structures, revenues (and profit margins for private schemes), administrative and service delivery costs, managerial capacity, etc. is often lacking. Further, socio-demographic, economic, and geographical characteristics of the covered population are not specified. This information is vital to the design of alternative insurance scenarios or to foster the extension of current ones. Moreover, it is important to ascertain member satisfaction with the services and willingness to support extension efforts.

In the Dominican Republic, HFS analyzed the above-mentioned characteristics of private, HMO-type insurance plans, known as Igualas Médicas, and the feasibility of extending the plans to low-income groups currently receiving limited coverage through the Ministry of Health. Characteristics of the Iguala membership were also examined. Based on the Iguala "models," several approaches to coverage extension were recommended. Researchers have identified the need to study the feasibility of cooperative-based plans in Kenya. In Pakistan, little is known about the costs of health services provided by provincial social security institutions, employers, and private companies. The government is interested in extending employee social security coverage as well as fostering an HMO-type insurance plan. A comparative study of social security vs. HMO-model schemes has been proposed by HFS to test the financial viability of extension efforts.

3. Limited Coverage by Social Security Services

As suggested in (1) above, social security institutions are generally "closed" systems that exclude low-income, non-salaried workers as well as rural residents. In HFS countries where social security systems thrive, a large part of the population is excluded. These include: Pakistan, Kenya, Dominican Republic, Peru, and Ecuador. In Belize, social security only covers medical care for work-related accidents. In general, only military personnel and urban-based workers and civil servants are covered. Moreover, in some countries (Dominican Republic, Ecuador, and Peru) dependents receive limited health benefits in comparison to the contributing insured.

Experts in Latin American Social Security agree that the hospital-based, curative health service model evident throughout the region is too costly to extend to the entire population. Similarly, low-income workers, the mass of the labor force, cannot afford the contributions needed to participate in the system. Some Latin American countries (Mexico, Brazil, and Ecuador) have experimented with social security extension efforts that attempt to provide inexpensive "basic" care to low-income rural inhabitants. Unfortunately, these extension efforts have not been fully assessed. In Ecuador, the social security institution extended primary

care services to organized rural workers in cooperatives and agrarian associations. The program is funded in part by higher-income, urban-based insured. Coverage is limited to approximately 10% of the rural population and appears to exclude rural workers not affiliated with organized groups. These workers represent the poorest segment of the rural population. Nevertheless, the Ecuadoran approach of extending a "limited" package of benefits is worth exploring.

The governments of Pakistan and Jordan may seek to consolidate existing social security schemes and at the same time extend coverage to all employed and self-employed workers. A "partnership" arrangement among state-subsidized (for the indigent), social security, and private insurance schemes has been recommended. Enrollment in a scheme may be compulsory for all employees. A uniform benefit structure has been proposed at the same salary level but members will have free choice of provider (public, social security, or private).

In countries where social security funds operate their own facilities, medical services tend to duplicate or overlap MOH services, thus creating a dual health system and an inequitable distribution of resources. Competition between health ministry and social security institutions for medical care personnel is also a concern. In some countries, more than one social security system exists, providing different levels of coverage to different occupation groups. The resource disparities between social security institutions and MOHs are notable. Per capita (insured population) expenditures for social security health services usually dwarf per capita (uninsured population) resources for health ministry services. Despite budget cuts and deterioration of services during the 1980s, social security health services are generally considered of superior quality when compared to similar MOH services. Most Latin American countries have attempted to coordinate MOH and social security health services. For example, in Peru and Ecuador, there is some cooperation between the two institutions regarding communicable disease control. In Panama, both institutions integrated medical service delivery. These experiments have had varied success, but the lessons learned are useful for planning future activities. Institutional and political obstacles to these efforts cannot be ignored.

4. Inefficiency in the Consumption and Production of Medical Care Under Insurance Schemes

Many health care systems and facilities, and their related financing systems, lack incentives to promote the efficient use of resources. Both social security and private insurance plans in developing countries suffer from inefficiencies. Deficient medical care organization, inefficient use of human resources, corruption, and severe administrative and logistical flaws have been observed in social security health programs in Ecuador, Dominican Republic, and Peru (and other Latin American countries). Overmedication, overutilization of secondary and tertiary facilities, and excessive consumption of diagnostic tests also contribute to high costs. An HFS team reported that a significant proportion of medicines purchased by social security in Ecuador never reach the patients. Further, since there is no functional referral system, hospitals tend to be overcrowded with patients who suffer from illnesses that could be treated at a primary level. Dehumanized and low-quality medical care is also an important issue. In the Dominican Republic, due to low-quality social security services,

an increasing number of insured workers have pressured employers to enroll them in private HMOs. In Pakistan, many employers are "opting out" of social security funds in part because of "second-class" service delivery.

Private insurance schemes in Jordan and the Dominican Republic provide evidence of costly overutilization in part due to fee-for-service reimbursement of physicians. This method of reimbursement appears to create incentives for unnecessary admissions and diagnostic tests as well as unjustified lengths of stay. In Kenya, the National Hospital Insurance Fund has little control over claims submitted by private providers. Fraudulent practices could be widespread. In the Dominican Republic some HMOs seek to contain high costs through experimenting with financial risk-sharing mechanisms such as prepaid capitated arrangements. Finally, in Jordan, Pakistan, and the Dominican Republic there is a need to establish and strengthen quality assurance systems, treatment protocols, and utilization controls in private facilities (see the HFS Cost Recovery Theme Paper). In sum, extension of health insurance (of any kind) could result in the escalation of costs unless the schemes are designed to include effective utilization and quality controls.

5. Socio-Cultural, Economic, and Managerial Constraints to Community-Based Social Financing Schemes

Voluntary contributions of resources by individuals and community organizations to pay for the provision of health services are seen to complement (but not replace) state-financed services in rural areas. Experience demonstrates that community financing schemes are often dependent on factors that may be unique to a particular region or inherent to the type of approach at issue. For example, most schemes require a shared commitment on the part of community members, pre-existing organizational and participatory structures, availability of "untapped resources" (at the village level), or the willingness of the government or an outside donor to sustain subsidization. For example, community revolving funds appear to be more successful where cash crops are grown or where a strong tradition of cooperative activities and self-help exists (Thailand). In Africa, community drug funds have demonstrated low performance due to mismanagement, interruptions in supplies, and poor payment collection. In the design of future activities, attention should be paid to the prevention of these problems.

In Pakistan, community-based religious committees, known as Zakat funds, may provide the appropriate mechanism to establish community financing schemes. These funds operate in 38,000 locales and leaders have expressed interest in providing health services to the "needy."

6. Absence of Preventive Services Offered through Third-Party, Social Security, and Community-Organized Health Plans

Social security institutions, HMOs, insurance companies, and community financing schemes in developing countries tend to focus on providing curative services. For example, an HFS team found that HMOs and insurance companies operating in the Dominican Republic offer limited coverage for preventive services. Immunizations were rarely covered and well-baby check-ups were considered equivalent to morbidity visits. The number of morbidity visits was restricted by most plans. As suggested earlier, social security institutions in Peru, Ecuador, Egypt,

Jordan, Kenya, Dominican Republic, and Pakistan are heavily oriented toward physician- (often specialist) based care in large hospitals. The insured receive preventive services such as vaccinations in MOH facilities.

In general, there exist few built-in incentives to keep enrollees healthy. Igualas in the Dominican Republic were created to channel patients to physicians. Social security laws in many countries usually stipulate morbidity treatment for the insured, and this is in effect the type of care demanded.

Executives of private risk-sharing schemes do not view preventive services in terms of their cost-saving potential. Some international planners have suggested that the government "coerce" insurance plans to use funds for preventive activities. Perhaps a more effective method would be to demonstrate that these services can reduce the costs of illnesses covered by the scheme, as is done with family planning services under USAID's TIPPS Project. In Peru, a mining company has recently introduced into its insurance plan a family planning and mother-child program for dependents of mineworkers. A business analysis demonstrated that these preventive services would reduce drug and other treatment costs related to curative services covered by the plan.

7. Government Policies Inhibit Private Insurance Initiatives

Although the degree of interference varies among countries, many international health planners maintain that government policies and legislation stifle development of private insurance markets. However, little research has been performed on this issue.

One potential area of study involves social security in Latin America. Latin American countries have legislated compulsory insurance schemes for most or all salaried workers, particularly in the modern, industrial sectors. Employers and employees are required to contribute to social security a fixed amount based on a percentage of salary earnings. Approximately 50% of these contributions are earmarked for medical care. Indirectly, the mandated salary-based employer and employee deductions may inhibit these groups from purchasing private insurance plans. This may contribute to the relatively limited market share of private managed care plans in these countries. Nevertheless, due to the low quality of health services provided by social security funds, workers in some countries have pressured employers to contract private insurers or providers. Essentially, the employer and employees are paying for two medical care plans (social security and private) but only participate in the private scheme. A recent household study in Santo Domingo, Dominican Republic found that one-fifth of respondents covered by social security were also affiliated with private HMOs. HMO coverage was obtained through their employers.

HFS ACTIVITIES IN SOCIAL FINANCING

The HFS Project has already begun discussions on or initiated activities in the area of social financing in a number of countries. These are likely to be further developed and refined over the next year of the project, and it is anticipated as well that potential activities in other countries will emerge. Discussions and activities to date have focused on expanding existing social

insurance programs to include additional segments of the population, improving efficiency, and strengthening quality assurance capabilities. A few examples of current or future efforts include applied research on community financing initiatives in Togo, increasing insurance scheme membership through agricultural cooperatives in Egypt and Pakistan, merging government health insurance programs in Jordan to reduce administrative costs, and using informal sector credit associations in the Dominican Republic as insurance grouping mechanisms. In the following sections specific examples are summarized by region and by country.

Africa Region

In the Africa region HFS is assisting countries to expand insurance to cover a greater number of services, extend coverage to a broader population base, and conduct research on community financing initiatives. Some of the country-specific efforts are described below:

Kenya - USAID/Nairobi has requested that HFS work with the National Hospital Insurance Fund, a parastatal organization which provides prepaid insurance coverage to salaried employees. Likely activities will include assessing options for including outpatient services in benefits packages and developing other prepayment mechanisms to extend coverage to a broader population base. Participation of agricultural cooperatives in the Fund and alternative means of contribution will be considered.

Togo - HFS may carry out applied research on several existing community financing initiatives. These schemes include elements of cost recovery and social financing.

Central African Republic - Short- and long-term assistance will be provided to the Ministry of Health to implement recently enacted health care financing legislation. Social financing may be one focus of the technical assistance.

Asia/Near East Region

Preliminary work by HFS in the Asia/Near East Region has identified a wide range of opportunities for future efforts in the realm of social financing. Some of the issues and activities to be pursued by HFS in the region include the following:

- social financing as part of an overall cost recovery program;
- extending insurance coverage to broader population bases;
- enrolling additional members into insurance schemes through agricultural cooperatives;
- expanding the private health insurance market;
- developing insurance schemes for government employees; and,
- promoting rural insurance schemes.

To date HFS has been active in Egypt, Pakistan, and Jordan. Country-specific activities are described below:

Egypt - A team of five advisors is assisting the Mission's Cost Recovery Project for Health in the revitalization of 50 government health facilities by converting their financing to a cost recovery basis. The team's economic advisor is addressing the role of social financing as part of the overall cost recovery project. Under consideration are ways to extend insurance coverage to non-salaried workers, particularly in the agricultural sector, where cooperatives are a logical vehicle for extension.

Pakistan - As part of a study on key health financing issues, HFS advisors participated in a team of health economics specialists to define key policy issues and options for Pakistan's National Health Policy. Recommendations on a number of social financing issues included deregulating and expanding the private health insurance market, developing an insurance scheme for government employees (whose health care now accounts for 40 percent of the public health budget), and examining prospects for rural insurance schemes.

Jordan - Potential activities include examining the possible merging and standardizing of government health insurance programs as a means of lowering administrative costs, analyzing the relationship between government health service costs and revenues, and studying the potential for government contribution to the government health insurance programs.

Latin America/Caribbean Region

In Belize, Haiti, Ecuador, and the Dominican Republic, the HFS Project has responded to a number of promising requests for assistance with social financing initiatives. They include:

- involving Social Security in the financing of health care delivery;
- reviving a failed insurance scheme originally based in urban slums;
- expanding private risk-sharing schemes to rural and urban workers; and,
- extending insurance coverage to the informal sector through microenterprises.

More detailed descriptions of the issues and HFS involvement in the four countries are provided below.

Belize - A health sector assessment recommended, among other things, involving the Social Security Board in financing health care delivery. Social Security operates an effective payroll collection system which could be tapped to improve health services in both the public and private sectors. Potential HFS activities would include:

- estimating the costs of using Social Security funds for routine health services;

- analyzing options for diverting funds to the health sector;
- analyzing policy and legal structures prohibiting the use of contributions for health care;
- conducting policy dialogue with relevant ministries and private physicians to reach agreement on administrative mechanisms; and,
- implementing the desired option for channeling Social Security funds to the MOH or private providers.

Haiti - Two years ago the Complexe Medico-Social de Cité Soleil (CMSCS) developed an insurance scheme in which employees of nearby factories would have access to CMSCS health facilities. The Complexe had planned to work with an intermediary private insurance company, which would in turn market the insurance coverage and charge its own fee. During an assessment of the Haitian health sector HFS learned that the insurance scheme had failed because the stigma attached to using CMSCS health facilities, located in a low-income area, prevented sufficient numbers of employers from participating in the plan.

There is now, however, discussion of reviving the insurance plan at a new site, the Bon Repos Hospital, which has been closed since 1986. The PVO which would operate the hospital has requested HFS assistance with a financial feasibility analysis of its plans to restart the insurance scheme targeting factory workers, and to turn the hospital into a financially self-sustaining operation.

Ecuador - Through discussions with the Mission, Ministry of Health, and health sector representatives, an HFS team identified the need to expand services through private risk-sharing schemes. HFS could be involved by providing technical assistance to the COOPSEGUROS Cooperative and an affiliated private HMO to design and implement a prepaid total health care plan for provincial rural and urban workers and families. In particular, the cooperative needs assistance to develop its demographic profile, estimate utilization rates, and set fees.

Dominican Republic - HFS assessed the possibility of extending insurance coverage through private HMOs to informal sector microenterprises in Santo Domingo. Utilizing microenterprise credit associations as grouping mechanisms, several extension models were proposed. The HMOs have expressed interest in covering the microenterprises and have requested assistance to establish strong quality and utilization controls.

FUTURE DIRECTIONS

The major USAID and HFS policy goals are to extend coverage and establish (or strengthen) the financial sustainability of social financing schemes. Improving the quality of medical care provided by affiliated providers is another important goal. The primary social financing policy question facing USAID and governments of developing countries is how to select appropriate and financially viable insurance schemes given the specific set of circumstances in countries and in regions within countries. A variety of schemes - at various stages of development - already exist in most developing countries. These experiences need further

study to document their strengths and weaknesses as extension options. As mentioned earlier in this paper, health financing assessments conducted during the 1980s have demonstrated that the major questions regarding social financing are based on observation and study of existing systems and behavior.

Future policy decisions will be based on researching, identifying, and testing viable extension models that consider the institutional and financial characteristics of the insurance schemes as well as the cultural, economic, and behavioral attributes of the potential membership. Longitudinal experiments, such as those carried out by the Rand Corporation in the U.S., can be conducted to test the effects of different insurance scenarios, benefit structures, and payment arrangements on demand, utilization, and health outcomes.

Several more specific courses of action have emerged from HFS assessments and experience over the past year. HFS recognizes the need to identify, assess, and strengthen potential grouping mechanisms whereby uninsured populations can be pooled for the purpose of participating in a risk-sharing scheme. Urban microenterprise credit associations and trade associations as well as rural cooperatives and farmer organizations are potential mechanisms. Existing insurance schemes need to be strengthened in terms of cost containment, provider choice, and quality assurance. This may result in the extension of membership to other salaried and middle-class groups who currently use state services. This may free state resources for use elsewhere where need is greater.

Finally, preventive services offered through insurance schemes are often deficient or non-existent. Cost-benefit and business analyses of medical care costs may demonstrate potential savings that can be obtained through offering preventive and family planning services as part of a benefit package. These services can be provided on a demonstration basis to determine costs, health outcomes, and future savings.

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